



2023 SLLS Annual Conference

Life Courses in Times of Uncertainty

9 - 11 October Ludwig Maximilian University of Munich

ABSTRACT BOOK

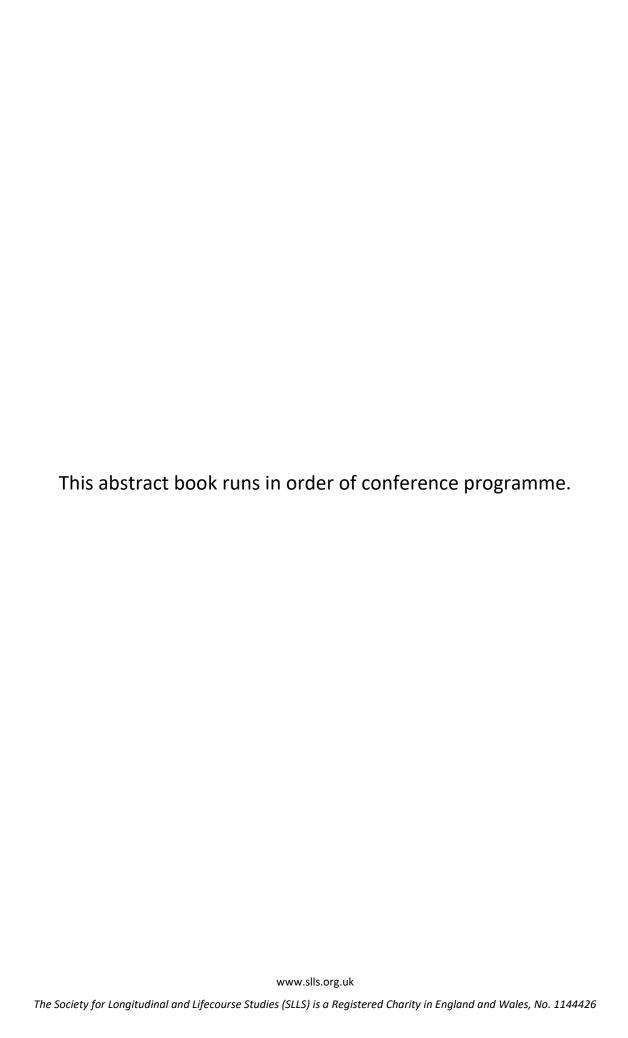


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DAY 1 Monday 9th October 2023

KEYNOTE PRESENTATION 1

Wealth and Reproduction

Presenter: Fabian Pfeffer, Ludwig Maximilian University of Munich

Wealth is an important and unique dimension of social inequality and social mobility. This talk presents three basic but nonetheless striking descriptive facts that together emphasize the urgency of increased scientific attention to wealth: First, wealth is different from other, more widely used indicators of economic well-being and inequality. Second, wealth is drastically more unequally distributed that any other economic resource. And third, wealth inequality is transmitted across generations and itself cements other social divides. The talk ends with a call for new approaches to study wealth as well as a provocative proposal of wealth redistribution.

1A SYMPOSIUM

Recent Developments and Innovations in Child and Youth Cohort Studies

Convenor: Lisa Calderwood, University College London

Longitudinal cohort studies of children and youth are a core part of the survey infrastructure in many countries, and in the light of the COVID-19 pandemic there has been a renewed focus on such studies as vital evidence bases for child and adolescent research including on well-being, education and labour market. This session will cover recent developments in child and youth cohort studies in Europe and Canada. The presentations will cover the scientific content and design of these studies, as well as findings and progress so far.

TALK 1: The Unequal Effects of the COVID-19 Pandemic on Young People's Education and Wellbeing: The COVID Social Mobility and Opportunities Study (COSMO)

Presenters: Lisa Calderwood and Xin Shao, University College London Co-authors: Jake Anders, Tugba Adali, University College London

It is widely appreciated that the COVID-19 pandemic has significantly exacerbated existing inequalities in education experiences and, hence, attainment. COSMO is a new youth cohort study aiming to provide an important part of the evidence base with which we can understand how the COVID-19 pandemic has affected the life chances of pupils of different characteristics both in terms of short-term effects on educational attainment and wellbeing, and long-term educational and career outcomes.

We aim to do this by providing a combination of rich, representative, longitudinal survey data linked with administrative data. The study is a collaboration between UCL Centre for Education Policy & Equalising Opportunities (CEPEO), UCL Centre for Longitudinal Studies (CLS), the Sutton Trust, Kantar Public as the fieldwork agency, and is funded by UKRI Economic and Social Research Council (ESRC). We have also worked closely with a wide range of stakeholders to shape the priorities for data collection.

COSMO has completed Wave 1 (age 16-17; October 2021-April 2022) and Wave 2 (age 17-18; October 2022-April 2023) fieldwork with around 10,000 young people and their parents through a mix of online surveys, targeted face-to-face follow up, and targeted telephone follow up. Questionnaires covered socio-economic characteristics of the households, experiences during the pandemic, education and work transition, experiences and attitudes, health impacts, and mental health and wellbeing.

We present new findings using our longitudinal data from Waves 1 and 2 focussing on gender, ethnic and socioeconomic inequalities in young people's experiences, and associations between COVID-19 experiences and short-term outcomes, including the interplay between pre-existing inequalities, pandemic experiences, and these outcomes.

Our work demonstrates the importance of understanding the ongoing and diverse impacts of the pandemic for education practitioners and policymakers and showcases the potential of COSMO data for researchers which will be deposited on the UK Data Service.

TALK 2: Developing an Innovative New Birth Cohort Study in the UK: The Early Life Cohort Feasibility Study (ELC-FS)

Presenter: Alyce Raybould, University College London

Co-authors: Alissa Goodman, Pasco Fearon, Karen Dennison, Erica Wong, Lisa Calderwood, University College London Longitudinal birth cohort studies are vital for understanding the development and outcomes of successive generations of children, though there is increasing recognition that often those families who are of most interest from a research and policy perspective are less likely to be recruited and retained in national studies. The UK Early Life Cohort Feasibility Study (ELC-FS), funded by the Economic and Social Research Council, is testing the feasibility of a new UK-wide birth cohort study. It is led by the Centre for Longitudinal Studies at University College London. It aims to recruit several thousand new babies from across the UK in the first year of life, with a target age at interview of around 9 months, and collect information on their economic and social environments, their health, wellbeing and development. Fieldwork is due to take place in Summer/Autumn 2023 carried out by Ipsos.

The study has strong focus on inclusivity and is designed to include robust representation of traditionally 'less often heard' groups. It includes sample boosts of babies born into disadvantaged and ethnic minority families, as well as Scotland, Wales and Northern Ireland, and direct recruitment of fathers including those living in their own households. Data collection will involve interviews with both mothers and fathers, as well as saliva and oral fluid swab collection for DNA extraction with a randomised subgroup, and linkage consents to electronic health and other administrative records. Interviews will be carried out primarily face-to-face, with web and phone also used. We also plan to use experiments to test the effectiveness of targeted differential incentives and conditional incentives.

This paper will give an overview of the design and implementation of the ELC-FS, with a focus on innovative aspects, and the extensive public engagement and development work which has informed the study.

TALK 3: Growing Up in Ireland: Evidence-based Development of the New Birth Cohort Questionnaires

Presenter: Eoin McNamara, Department of Children, Equality, Disability, Integration and Youth, Ireland Co-authors: Clare Farrell, Caolan Rooney, Department of Children, Equality, Disability, Integration and Youth, Ireland Growing Up in Ireland (GUI), the national longitudinal study of children and young people, was established in 2006 to describe the lives and experiences of children, young people and their families over time. The study is an invaluable national data and research resource, with findings from the study helping to identify the impact of policy changes, unexpected societal events, and the underlying mechanisms that support or impede children and young people's well-being outcomes.

Two cohorts of young people and their parent(s) were initially recruited into the study; a 'child' cohort recruited in 2007 at age 9 and an 'infant' cohort recruited in 2008 at age 9 months. In 2022, the Irish government approved the establishment of a new GUI birth cohort, to be recruited at age 9 months. Pilot fieldwork for this new cohort is scheduled to commence in late 2023, with main fieldwork due to begin in 2024.

Throughout autumn 2022, the research unit at the Department of Children, Equality, Disability, Integration and Youth (the study sponsor) worked closely with the Irish Central Statistics Office to identify priority data needs, data gaps and suitable instruments to inform the development of questionnaires for the new birth cohort. This process was informed by a range of resources: a scoping review of relevant literature; a review of lessons and best practices from international surveys; a series of consultations with Irish academics, NGOs and policymakers; and consultation with national and international research experts. This comprehensive process of identifying data needs and gaps will ensure the final survey is scientifically sound, policy relevant and practically useful. This presentation provides insights into the establishment of the new cohort and the development of associated questionnaires, as well as discussing key lessons arising for research which aims to inform future evidence-based policymaking.

TALK 4: Growing Up in Digital Europe: Measuring Wellbeing from Birth to 24-Years

Presenter: Jennifer E. Symonds, University College Dublin

Co-authors: Gary Pollock, Manchester Metropolitan University; Toni Babarovic, Ivo Pilar Institute; Lidia Panico, Sciences Po; Laura Taylor, University College Dublin; Katariina Salmela-Aro, Katja Upadyaya, University of Helsinki; Ognjen Obucina, Sandra Florian, Institut National d'Études Démographiques; Maurice Martens, Centerdata

Growing Up in Digital Europe (GUIDE) is Europe's first cross-national cohort study of infants and children. GUIDE uses an accelerated longitudinal design comprising a cohort of infants and a cohort of 8-year-olds to track wellbeing from birth to age 24-years. Since 2014, an international team growing to 23 partners in 19 countries has developed GUIDE towards a planned first wave of fieldwork in 2027, with support from the European Commission.

In 2018, GUIDE researchers began developing a theoretical framework for measuring wellbeing through a combination of child and parent report. The framework builds on traditional approaches to studying child development in cohort studies by focusing on wellbeing as a central organising construct. A combination of psychological and sociological perspectives was used to identify gaps and consistencies in measurement areas for infants and 8-year-olds. Triangulation of child and parent perspectives for 8-year-olds further broadened the measurement scope. Issues of cross-cultural validity and longitudinal utility also underpinned the design.

In this presentation we will outline the development of the new framework from theoretical and measurement perspectives. We will explain how we used the framework to create our initial questionnaires for 8-year-old children and their parents, and for parents of infants, through an international collaborative approach. Finally, we will overview the empirical development and pilot testing of the questionnaires in Ireland, Finland, Croatia, and France. Cognitive interviewing was performed with 68 children and 40 parents, followed by computer assisted personal interviewing (CAPI) and computer assisted web interviewing (CAWI) with approximately 1,000 children and 2,000 parents. The presentation will conclude with implications for cohort study research design and wellbeing measurement.

TALK 5: Growing Up in Québec: Successes and Challenges of a New Birth Cohort Study

Presenter: Jessica Gagnon-Sénat, Institut de la statistique du Québec

Co-authors: Nancy Illick, Delphine Provençal, Institut de la statistique du Québec

Since 1998, the Québec Longitudinal Study of Child Development, 1st edition (QLSCD 1) has been following a cohort of children born in Québec (Canada) and their families. Given that Québec society has changed significantly over the past two decades, it is important to capture the reality of children born more than 20 years later and their families.

The Québec Longitudinal Study of Child Development, 2nd edition (QLSCD 2), also called the Growing Up in Québec study, was started to fulfil a need for knowledge about the development of children born in the early 2020s. Its main objective remains similar to that of the first edition: to identify development trajectories and factors that contribute to the well-being of young people born in Québec in 2020-2021.

First, we will summarize the main parameters of the new birth cohort study. This includes a brief comparison of the sampling and data collection strategies between the two QLSCD editions as well as an overview of the multi-respondent and multi-instrument data collection process of Growing Up in Québec. The strengths of this new study will be presented, such as the oversample of children born in situations of socio-economic poverty to compensate for non-response that may be higher in this subgroup. Then, the data collection results from the first two waves (5 months and 17 months old) of the study will be presented along with some main themes of the questionnaires. Some challenges encountered during data collection will also be discussed.

Finally, we will describe ongoing and upcoming work for Growing Up in Québec, including the cognitive tests planned for the early childhood phase and the questionnaire for the childcare provider.

1B SYMPOSIUM

Recent Developments in Exploring the Social-Biological Transitions

Convenor: Stéphane Cullati, University of Fribourg

Organised the initiative of the SLLS Inter-disciplinary Health Research group (IHRg) initiative, this seventh symposium is devoted to the presentation of recent results of researchers working with social and biological data for descriptive, predictive or causal explanations, in the field of social-biological transitions (the processes by which the social becomes biological). This symposium will include presentations on advances in longitudinal and life course research on health biomarkers such as allostatic load, inflammatory markers, genes, metabolic and cardiovascular markers, microbiomes, and mortality, and their link to social exposures (e.g., family educational culture, occupational and/or family histories, living alone transitions), measured at different stages of the life course (or continuously). The impact of stress (social, economic or physical) and lack of resources (economic, relational, cultural), and their timing of their exposure in the life course, on biological health, as well as the unravelling of the competing mechanisms between epigenetic factors and genes expression, will be some of the topics that will be discussed in this symposium. Bringing together the diversity of approaches and focus of this high-quality research, we will have the opportunity to contribute to the emergence of a shared scientific framework.

TALK 1: Explaining Biological Differences Between Men and Women by Gender Mechanisms

Presenter: Hélène Colineaux, University of Toulouse

Co-authors: Lola Neufcourt, Cyrille Delpierre, Benoît Lepage, Michelle Kelly-Irving, University of Toulouse

Introduction. Allostatic load is calculated using biomarkers that are differently distributed according to sex. Are these differences only linked to sexual dimorphism or can they be explained, at least in part, by gendered mechanisms? Based on different conceptualisations of gender, we developed methodological strategies to answer three questions empirically: (1) Are there biological differences between men and women? (2) Are these differences explained, at least in part, by gender mechanisms? (3) Do these differences vary when social environment or characteristics varies?

Methods. We used the 1958 British birth cohort (population aged 44-45 years) and the French survey CONSTANCES (population aged 40-50 years). We explored anthropometric measures, cardiovascular, metabolic, inflammatory, neuroendocrine biomarkers and allostatic score. For the analyses, we relied on the methodology of causal inference, mediation and interaction analyses, based on counterfactual reasoning. We estimated the different effects using the g-computation method on bootstrapped and imputed data.

Results. We observed that the levels of most biomarkers were significantly different between women and men. Effect sizes of sex were larger than effect sizes of early social disadvantage, except for two inflammatory biomarkers. We identified three types of gender mechanism to explain these Male-Female differences: (1) Mediation of the sex effect by gender mechanisms; (2) Attenuation of the sex effect by gender mechanisms; and (3) Difference in sex effect according to social environment or social characteristics.

Discussion. The biological differences between men and women involve many biomarkers and are wider than those observed between other social groups. However, they are not purely explained by biological mechanisms. These results open new perspectives, both in terms of potential applications, methodology and understanding of gendered biological embodiment.

TALK 2: Quantifying the Impact of Minor and Major Stressors on Epigenetic Ageing: The Role of Socioeconomic Factors

Presenter: Martin Diewald, University of Bielefeld

Co-authors: Lena Weigel, Dmitry Kuznetsov, University of Bielefeld

Epigenetic clocks and the concept of epigenetic ageing are commonly used to measure the rate and pace of biological ageing resulting from both biological and environmental factors. Recent research has shown that exposure to stress in the early and later stages of life can accelerate the epigenetic ageing process. However, several questions remain unanswered. For instance, it is unclear what are the physiological mechanisms in the effect of stress on epigenetic ageing, which stressors are particularly harmful, and to what degree genes and the environment influence the effect of stress on epigenetic ageing.

To address these questions, we conducted a study on monozygotic and dizygotic twins from the "Twin Life" study – based on a probability sample of twin families in Germany. The epigenetic ageing measures were obtained from saliva, twice with a one-year time lag. Indicators of epigenetic ageing included GrimAge, DunedinPACE, Horwath, and gestational DNAm clocks. We also considered minor and major life stressors, including daily hassles and negative events such as parental separation, financial difficulties, and job loss. Molecular genetic indicators of environmental sensitivity derived from genome-wide association studies, e.g., for chronic inflammation, were considered as potential moderators and mediators in the investigated associations.

Our analysis has focused on the extent to which minor and major life stressors affect epigenetic ageing across socioeconomic groups and the role of environmental sensitivity in this process. Using classical biometrical twin modelling, we were able, in addition, to estimate the contributions of genetic and environmental factors to epigenetic ageing and its dynamics under different stressors.

Overall, our study provides insights into the role of stress in epigenetic ageing and highlights the importance of considering socioeconomic factors when investigating the impact of stress on the ageing process.

TALK 3: Understanding Inequalities in Allostatic Load Using an Intersectionality Lens: Multi-Level Analyses of the UK Household Longitudinal Study (Understanding Society)

Presenter: Tony Robertson, University of Stirling

Co-authors: Ebenezer Essien, Paul Lambert, University of Stirling

The emergence of social inequalities in health can best be situated in the concept of intersectionality. This concept which was first proposed by Crenshaw (1989,1991), aimed at addressing the social injustices confronting black women at the interconnection of gender and race/ethnicity. Intersectionality research has developed to examine the social, economic and demographic categories (such as ethnicity, social class and gender) that interconnect and interact to create modes of discrimination and privilege which can be manifested in worse health outcomes in certain groups within our populations. In turn, intersectional inequalities have been linked to exacerbated health inequalities, but so far research has focused on qualitative explorations of intersectionality, or analysis of wellbeing or disease outcomes.

The aim of our research is to build on emerging work examining quantitative assessments of intersectionality and pre-disease physiological markers (Holman et al, 2020-2022) to incorporate physiological wear-and-tear, as measured by allostatic load, as the keep outcome of interest and incorporate adults across all ages. We hypothesise that combinations of socio-demographic factors will be linked to poorer physiological health and risk of ill health, and that those experiencing several of these factors linked to discrimination simultaneously and over time (e.g., ethnic minority women living in poverty) will in turn have the worst relative health outcomes.

We will present emerging results from analysis of the UK Household Longitudinal Study (UKHLS/Understanding Society) where we have modelled the relationships between intersectionality and allostatic load using multi-level modelling approaches in order to best quantify, test, and analyse stratification positions in the concept of intersectionality.

TALK 4: Social Inequalities, Stressful Work, and Cardiovascular Disease: Follow-Up Findings from the CONSTANCES Study

Presenter: Morten Wahrendorf, Heinrich-Heine-University of Düsseldorf

Co-authors: Marcel Goldberg, Marie Zins, INSERM France; Johannes Siegrist, Heinrich-Heine-University of Düsseldorf
Studies show that a disadvantaged socioeconomic position (SEP) and psychosocial stress at work are both independently linked
to increased risks of cardiovascular disease (CVD). But it is not clear if the effect of stress at work on CVD varies by SEP. Against
this background, we use baseline and follow-up data of the French CONSTANCES population-based cohort study (including 48.383
employed women and men aged 30 to 70 years) and investigate the association between work stress and incident CVD, together
with possible effect modifications by SEP. Three SEP indicators (education, income, occupation), stressful psychosocial work,
measured by effort-reward imbalance, pre-existing CVD, and confounders were assessed at baseline, and incident non-fatal CVD
events reported during yearly follow-up were used as outcomes (up to five follow-ups). The effect modification hypothesis was
both investigated on an additive and multiplicative scale. Results show that SEP was inversely associated with CVD risk (e.g., for
low vs. high income, odds ratio (OR)= 1.28 (1.12; 1.46)), and for all three components of stressful work CVD risks were significantly
increased (e.g., for effort-reward ratio OR= 1.26 (1.17; 1.36). Employees with low SEP exhibited moderately increased effect sizes
of stressful work on CVD. Yet, no clear evidence of an effect modification was found. In conclusion, disadvantaged SEP and
stressful work contribute to higher CVD risk in this cohort. Despite moderately increased effect sizes among lower SEP groups,
no evidence in favour of the effect modification hypothesis was found.

TALK 5: The Moderating Role of Sex and Age in the Relationship Between Partnership Status and DNA Methylation Age Acceleration

Presenter: Wen Wang, University of Essex

Co-authors: Anna Dearmana, Yanchun Baob, Meena Kumari, University of Essex

Background: Although a significant body of research has shown that married people are healthier (both mentally and physically) and live longer compared to their counterparts, empirical research results on gender differences in the link between marital status and health are mixed. Moreover, the gender disparities in marital status and health relationships vary across adulthood. The literature on partnership status and measures of health and ageing is largely focused on older age groups and limited in its view of life course stages from early adulthood to old age.

Objectives: To examine the association of de facto marital status with epigenetic age assessed with the DNA methylation (DNAm) algorithms 'Phenoage' and 'DunedinPoAm'.

Methods: Data from Understanding Society were used to examine the association between marital status and positive age acceleration (AA), that is older biological age compared to chronological age, in N = 3500 participants. Regression models were estimated separately for men and women and stratified by age group.

Results: Single/never partnered, divorced/separated, and widowed people showed positive age acceleration compared to married/cohabited people. Differences in these association were apparent in men and women, especially among the never partnered groups. Age differences were also apparent, for example, in men, being single and never partnered was negatively associated with positive age acceleration in the younger age, but positively in the oldest group compared to partnered counterparts, while the opposite pattern was apparent in women.

Conclusion: Our findings suggest that marital status is associated with measures of biological age for the whole age range of people in the UK. Further they highlight the importance of considering marital status as a covariate in the associations of biological age with a variety of outcomes.

1C INDIVIDUAL PAPERS (HEALTH INEQUALITIES)

TALK 1: Healthy Aging and Life Course (Dis)Advantage: A Cross-national Comparison of 31 High and Middle-Income Countries in Europe, North America, and Asia

Presenter: Rachel Wilkie, University of Southern California Co-author: Jennifer A. Ailshire, University of Southern California

Healthy aging is defined by the WHO as the maintenance of cognitive and functional ability throughout older ages. Socioeconomic position across the life-course is important to the aging process and health outcomes in later life, though it is unclear if these lifecourse factors are consistently associated with aging across countries. Our study aims to understand how childhood and adulthood circumstances combine to impact healthy aging across 31 high-and-middle-income countries in Europe, North America, and Asia. We used five nationally representative studies of aging across 27 countries in Europe (SHARE), the US (HRS), England (ELSA), China (CHARLS), and India (LASI). Our sample includes community-dwelling adults aged 51 years and older interviewed between 2017-2019. Healthy aging was measured using a score of 50 harmonized items on cognitive and physical functioning and chronic conditions. Life course (dis)advantage was measured using harmonized measures of conditions in childhood (parental education and childhood health) and adulthood (educational attainment, and income and wealth), categorized separately into low, middle, and high disadvantage. Linear regression models of healthy aging score testing the interaction between childhood and adulthood disadvantage, adjusted for age and gender, were performed separately by country. In all countries, adulthood disadvantage was more important than childhood disadvantage in determining healthy aging inequalities. However, in 15 countries, respondents with disadvantage in both childhood and adulthood had significantly lower healthy aging scores compared to those who were advantaged in childhood and disadvantaged in adulthood. In 6 countries, those with childhood disadvantage and adulthood advantage had significantly lower healthy aging scores compared to those with advantage in both childhood and adulthood. Our results suggest that the impact of life course (dis)advantage on healthy aging varies widely between countries, suggesting that societal factors may influence how socioeconomic disadvantage across the life course contributes to healthy aging.

TALK 2: Socioeconomic Inequalities in Cardiometabolic Health During Adulthood: Investigating Mechanisms Through Unhealthy Behaviours in Adolescence

Presenter: Josephine Jackisch, University of Fribourg

Co-authors: Nazihah Noor, Cristian Carmeli, University of Fribourg

Neighbourhood in which a person grows up negatively affects cardiometabolic health in midlife. Less is known about the contribution of health behaviours in mediating these socioeconomic inequalities in cardiometabolic health. This study aims to investigate mechanisms by which health behaviours in adolescence could mediate family and neighbourhood socioeconomic inequalities in adult cardiometabolic health. By investigating the specific pathway via health behaviours, we can shed light on mechanisms such as differential exposure and susceptibility. With this we mean that unhealthy behaviours might be more common among those from socioeconomic disadvantaged backgrounds (differential exposure) but individuals from disadvantaged socioeconomic backgrounds might also experience different effects of their health behaviours (differential susceptibility). We will draw on data from over 3000 individuals in the Young Finns Study, a prospective population-based cohort study with baseline assessment in 1980, when participants were 3-18 years of age, and follow-up until 2011. Cardiometabolic

health (outcome) will be assessed via inflammatory, metabolic and cardiovascular biomarkers measured between ages 24-48. Health behaviours will encompass physical (in)activity, alcohol consumption, dietary habits and smoking. We will apply a counterfactual mediation approach to decompose the total effect into the portion attributable to differential exposure and the portion attributable to differential susceptibility to unhealthy behaviours. Results will be ready in October at the time of the conference. We expect this study to provide further evidence of how much of the impact of early social disadvantage on cardiometabolic health in adulthood could be mitigated through changing health behaviours in adolescence. Further, evidence on differential exposure and susceptibility can support distinct preventive strategies. For instance, increased susceptibility to adolescent unhealthy behaviours among socioeconomically disadvantaged groups may require prioritization of preventive policies targeting these vulnerable population groups in order to mitigate socioeconomic inequalities in cardiometabolic health.

TALK 3: Morbidity Expansion in Type 2 Diabetes: Do Socioeconomic Inequalities Exist? A German Longitudinal Study on Socioeconomic Differences in the Development of Comorbidities in Type 2 Diabetes

Presenter: Batoul Safieddine, Hannover Medical School

Co-authors: Stefanie Sperlich, Johannes Beller, Karin Lange, Siegfried Geyer, Hannover Medical School

Background: In a German population of statutory health insured individuals in the state of lower Saxony, morbidity in type 2 diabetes (T2D) has been expanding due to higher rates and numbers of comorbidities, higher disability rates and more time lived with the disease. Little is known on whether the temporal increase in T2D comorbidities applies to different socioeconomic (SES) and population subgroups. Aims: This study aims to examine whether SES inequalities exist in the rates and the temporal development of T2D related comorbidities among the population subgroups: working individuals, nonworking spouses and pensioners. Methods: The study used claims data of the statutory health insurance provider "AOKN" in the state of Lower Saxony, Germany. The development of comorbidities was examined for a T2D population of 354995 men and 431809 women for three time-periods between 2005 and 2017. SES was operationalized by means of income, education and occupation. Predicted probabilities of three T2D comorbidity-groups and number of comorbidities (in four categories) among different SES groups were estimated using logistic and ordinal regression analyses, respectively. Interaction analysis was applied for time period and SES variables to examine whether SES inequalities exist in the development of comorbidities. The analyses were stratified by gender and three population subgroups. Results: the study showed that no social inequalities exist in the presence or the temporal development of T2D comorbidities. While little if any change took place for the comorbidity group severe cardiovascular (CVD) comorbidities, predicted probabilities for less severe CVD and other vascular diseases, as well as those for the number of comorbidities rose significantly over time for all SES and population subgroups examined. Female and male nonworking spouses had markedly higher predicted probabilities for most of the examined outcomes compared to working individuals, indicating a higher morbidity level for this population subgroup. Conclusion: The expansion of morbidity in T2D does not appear to be SESdependent, and applies equally for working individuals, nonworking spouses and pensioners. Nonworking spouses are a susceptible population subgroup that needs to be focused upon when planning and implementing DT2 management interventions.

TALK 4: The Mediating Effect of Racism on the Longitudinal Relationship Between Ethnic Minority Status and Mental Health Presenter: Kishan Patel, University College London

Background: The relatively poor mental health of minority ethnic groups in the UK is well documented, but the ethnicity gap has been shown to widen throughout the life course. Therefore, the differing life experiences of ethnic minority young people and their white counterparts have been identified as a contributing factor of the worsening of ethnic minority mental health. One such factor is exposure to racial discrimination, whether experienced first-hand (primary), or second-hand (vicariously). This study aims to fill a current research gap by linking three datasets and quantifying the longitudinal impacts of primary and vicarious racial discrimination on the mental health of ethnic minority people in UK households. Methods: Data was drawn from the Understanding Society longitudinal study, comprising of the core, ethnic minority boost, and family matrix datasets. The analytic sample comprised of all ethnic minority participants with information at baseline, and at least one measure of high psychological distress across the follow-up period (n=9945; 53.4% female). Initial descriptive analyses were conducted to provide and overview of the sociodemographic characteristics of the analytic sample, including household size, history of migration, and numbers of family members within and outside the household. Mediation analyses were employed to quantify the extent to which experiences of primary and vicarious racism alter the longitudinal relationship between ethnic minority status and changes in mental health. Findings: Early findings indicate an increased worsening of mental health over time for persons who had experiences of either primary or vicarious racism.

TALK 5: Health Inequalities in Midlife in the UK and USA: Comparison of Two Nationally Representative Cohorts

Presenter: Charis Bridger-Staatz, University College London

Co-authors: Iliya Gutin, Lauren Gaydosh, University of Texas at Austin; George B. Ploubidis, Jenny Chanfreau, Laura Gimeno, Alice Goisis, Bettina Moltrecht, Dario Moreno Agostino, Vanessa Moulton, Martina Narayanan, University College London; Jennifer Dowd, Andrea Tilstra, Jose Manuel Aburto, Maria Gargiulo, University of Oxford International comparisons typically show that the USA has worse health than the UK. However, previous comparisons are typically in older age, with little understanding of differences in midlife. Socioeconomic inequalities in health have been demonstrated in both countries, but how inequalities in midlife health vary across the USA and UK is not known. We compare mid-life health in the USA and UK using data from the 1970 British Cohort Study (BCS70) (N= 9,665) and the National Longitudinal Study of Adolescent to Adult Health (Add Health) (N=12,297), when cohort members were aged 34-46 and 32-42, respectively. Health is measured by sedentary time, smoking status, alcohol consumption, body mass index, self-rated health, cholesterol, blood pressure, and glycated haemoglobin (HbA1c) using modified Poisson regression. We also test whether associations vary by parental education in childhood, and household income and education level in midlife. Midlife USA adults had worse health, particularly for unhealthy levels of cholesterol (RR 1.98, 95% CI: 1.27 to 3.1), alcohol consumption (RR 2.06, 95% CI: 1.80 to 2.37)

and HbA1c (RR 3.61, 95% CI 2.11 to 6.19). Sedentary behaviour and smoking were the only outcomes with lower risk in the USA. We find that for the majority of outcomes, the USA health disadvantaged was confirmed in mid-life. Moreover, there were smaller socioeconomic inequalities in midlife health in the UK. This may reflect different UK social policies such as the national health service and welfare that attenuate the impact of socioeconomic inequalities on health.

1D INDIVIDUAL PAPERS (SCHOOL-TO-EMPLOYMENT 1)

TALK 1: The Relevance of School-Based Career Guidance for Postsecondary Outcomes of Young People from Regional, Rural and Remote Backgrounds in Australia

Presenter: Wojtek Tomaszewski, The University of Queensland

Co-authors: Francisco Perales, Ning Xiang, Melissa Johnstone, The University of Queensland

This paper investigates the relevance of career guidance received at school for post-secondary outcomes of young people from regional, rural and remote (RRR) backgrounds in Australia. Given the vast geographic distances between rural and urban centres within Australia, people from RRR communities experience very different life circumstances than people from urban areas often lacking access to important resources and high-quality services. This situation applies particularly strongly to children and young people, who are going through critical developmental educational stages of their life course. This research leverages data from the 2009 Longitudinal Surveys of Australian Youth (LSAY), comprising data on 66,297 observations from 14,251 participants, and employs event history regression models to model outcomes of young people from RRR backgrounds at various points of their post-school trajectories. Specifically, the analyses examine the associations between RRR background, and students' chances to enrol into and complete university, to enrol into VET, and to obtain high-paying or high-status employment, focusing on the role that career guidance received at school plays in shaping these outcomes. The evidence suggests that RRR background reduces the chances of university participation, whereas receipt of certain types of career guidance increase these chances. Furthermore, certain forms of career guidance increase the likelihood of enrolling into VET courses for RRR students, while there is mixed evidence regarding employment outcomes among these students. Importantly, career guidance appears more strongly associated with better employment outcomes for RRR students, compared to those from metropolitan backgrounds. These findings suggest that policy initiatives aimed at improving access to quality school-based career guidance in regional and rural schools might help to reduce the gaps in educational and labour market outcomes driven by a locational disadvantage.

TALK 2: When Analysing Intergenerational Mobility, Be Cautious About the Timing of the Measurement of Children's Occupational Position

Presenter: Richard Nennstiel, University of Bern

The study of absolute mobility patterns is crucial for understanding social stratification and mobility opportunities. Recent research from countries like the U.S. and Germany indicates deteriorating absolute mobility patterns, particularly affecting younger men. Methodological approaches in measuring intergenerational social mobility may contribute to these findings, with age limits assuming occupational maturity is reached at 30-35 years. This study aims to determine how absolute occupational mobility patterns are affected by the age of measurement of occupation in the child generation. Utilizing two large-scale panel datasets from Germany (NEPS and GSOEP), the study examines nine 5-year birth cohorts and measures occupations at different life stages (ages 28-32, 33-37, 38-42, and 43-47) using the highest Magnitude Prestige Score (MPS) as an indicator of social placement. Absolute mobility is calculated by comparing the highest MPS of parents and children. Results indicate that measuring occupational prestige later in the life course results in higher upward mobility for younger cohorts. When measured at ages 28-32, a trend towards more downward mobility and less upward mobility is observed. Conversely, when measured at ages 43-47, mobility patterns remain constant. The impact of measurement timing is less significant for women, potentially due to selective labour market participation. The study concludes that occupational maturity might occur later than assumed in previous research, and the timing of occupational position measurement has a substantial impact on the analysis of absolute mobility patterns. If measured early in the life course, a trend toward less upward mobility emerges, while measuring later in the life course reveals little change across cohorts. The findings underline the importance of considering intragenerational mobility processes in intergenerational mobility analysis and not assuming them as time-invariant regularities. By acknowledging the role of intragenerational mobility, researchers can better understand and interpret patterns of social mobility in contemporary societies.

TALK 3: Gen Y, The Resilient Generation? How the Long-Term Effects of Precarious Employment Crush Aspirations for Achieving the Traditional Markers of Adulthood

Presenter: Jenny Chesters, University of Melbourne

As economies across the world recover from the COVID-19 induced recessions, policies designed to smooth the transition from full-time education into full-time employment need to be re-imagined. As research shows, when it comes to employment, it is the young who bear the brunt of labour market contractions. Not only are youth unemployment rates far higher than those of older workers, but they also take longer to recover. Furthermore, underemployment has become entrenched as employers take advantage of new technology and lax employment regulations which allow them to hire workers for gigs rather than for long term, full-time jobs. Consequently, young people may not meet the traditional markers of adulthood, such as, setting up an independent household, parenting and home ownership, until a decade or more after leaving full-time education. Although this generation have largely achieved their aspirations for completing higher education, gaining entry into the professions and securing full-time permanent employment has not been as easy as they imagined. Young people who completed secondary school in the mid-2000s have experienced particularly volatile economic conditions due the Global Financial Crisis of 2008-09, the recession of the 2010s and the COVID-19 recession in 2020-2022. To examine the impact of experiencing at least two major economic contractions during the early years of employment careers, I conduct analysis of longitudinal survey data collected by

the Life Patterns Project from one cohort of young Australians between 2013 and 2022 when they were aged 25-34 years. The data include employment status, health and relationship status in each year plus sex, level of education, number of children, if any, and whether they are paying off a mortgage or renting in 2022. This cohort's high rates of engagement in precarious employment provide an opportunity to examine the impact of insecure work on outcomes in young adulthood.

TALK 4: Life Satisfaction Between Private and Occupational Life the Mutual Causal Effects of Life Domain Preferences and Satisfactions Over the Life Course in the Cologne High School Panel (CHISP)

Presenter: Heiner Meulemann, University of Cologne

Co-authors: Klaus Birkelbach, Duisburg-Essen University; Christian Sondergeld, University of Düsseldorf; Veronika Witt, University of Cologne

It is argued that satisfaction with one's life should be surveyed according to its two principal axes, private and occupational life; that satisfaction with the first should depend positively on the preference for private over occupational life, satisfaction with the latter negatively. The mutual impacts between satisfactions with private and with occupational life and the preference for private over occupational life are investigated from late youth to old age by structural equation modelling with random effects in a broad data format variables*wave; successes in occupational and private life success – hourly income and prestige as well as partnership status and number of children – are controlled for. Data are from 1013 respondents of the CHISP (Cologne High School Panel). It comprises a primary survey age 16 and four follow-up surveys at age 30, 43, 56 and 66. As high school – Gymnasium – is and was in 1969 even more socially selective, our sample is so as well at age 16 – but only minimally increasingly so later due to panel attrition. Of the 3240 high school students sampled 1969 at age 16, 1013 have been re-interviewed continuously up to age 66 in 2020. Over the whole life course, the preference for private over occupational life has a persistent and slightly increasing negative effect on occupational life satisfaction, but no effect at all on private life satisfaction. Paradoxically, the everyday prominence of private life seems to exclude its determination by the preference for it. In both domains, successes have a persisting, yet decreasing impact on life satisfaction.

1E INDIVIDUAL PAPERS (POVERTY AND DEPRIVATION)

TALK 1: Accumulation or Adaptation Effects of Long-Term Exposure to Material and Psychosocial Factors: Examining Income Differences Using the German Socio-Economic Panel

Presenter: Anja Knöchelmann, Martin-Luther-University Halle-Wittenberg

Co-authors: Tobias Rähse, Gesundheitsforen Leipzig; Matthias Richter, Technical University Munich

Background: Research shows that material and psychosocial factors are important for explaining health inequalities. Yet, these results are mainly based on cross-sectional studies. Additional research indicates that material factors may be less significant when considered repeatedly over the life course. However, continuous exposure to disadvantageous psychosocial or material circumstances have not been studied yet. They may be associated with health in terms of accumulation of disadvantages or people might be able to adapt to difficulties. Therefore, we aim to investigate the association of long-term exposure to material and psychosocial factors with health. Methods: The analysis is based on the German Socio-economic Panel (1994-2017) including participants (age: 18-75) for whom at least two survey dates were available. In total 266,255 and 236,787 observations from 31,961 women and 29,149 men were included in the final sample. Self-rated health was used as outcome measure. Material factors included debt burden, housing quality and housing status. Economic insecurities and material wellbeing were used as psychosocial measures. Fixed-effects regressions were estimated, stratified by income groups (quintiles). Exposure duration was calculated as observed years in exposure for each of the factors, taking only continuous exposure years into account. Results: For most factors, continuous exposure to disadvantageous circumstances was found to have a negative impact on health. This was especially true for financial worries, income satisfaction and housing status. This association was found for different income groups, with low- and middle-income individuals being particularly vulnerable to accumulation processes. Conclusion: The association between material or psychosocial factors and health tends to accumulate with longer exposure duration. Furthermore, health effects can be expected to accumulate even more since some persons might not only experience one episode of disadvantages during their life course and it is also likely that people are exposed to more than one factor.

TALK 2: Measuring Children's Experiences of Material Hardship: Cross-sectional and Longitudinal Insights

Presenter: Molly Grant, The University of Auckland

Co-authors: Kane Meissel, Daniel Exeter, The University of Auckland

The measurement of material hardship has become a significant indicator of deprivation and poverty. Measures of hardship serve as valuable supplements to income-based measures of poverty by offering direct insights into the lived realities of how individuals and families, access (or lack access to) essential everyday items and amenities. This paper focuses on multidimensional ways of examining material hardship, both cross-sectionally and longitudinally using data from the Growing Up in New Zealand longitudinal study of children and their families. Experiences of material hardship were tracked from birth through to early adolescence, and we explored how different approaches to measuring material hardship over time are relevant to how we understand hardship and how it unfolds across the life course. In particular, we explored how different approaches to measuring material hardship can lead to different conclusions about the prevalence and persistence of hardship over time. The findings from this study add to the body of research on the complex and dynamic nature of material hardship, how material hardship is tracked across time, and the inequities faced by children. We highlight the importance of taking a longitudinal approach to studying material hardship and child poverty.

TALK 3: A Longitudinal Analysis of Child Poverty in Germany Using Child-specific Poverty Measures

Presenter: Miriam Gohl, University of Mannheim

Growing up poor has negative consequences for multiple life domains. Concerningly, every fifth German child experiences income poverty. While politicians and scholars acknowledge the importance of combatting child poverty in reducing poverty across the whole life course, longitudinal research on child poverty using child-specific poverty measures is missing. Children experience poverty differently from adults and have different basic needs. Thus, a sound knowledge of poverty characteristics relevant to children and of how these characteristics interact across the life course is necessary to design effective policies to prevent child poverty. I analyse child poverty trajectories combining two child-centred poverty measures - child-specific deprivation and parental employment - with the classical income measure. Using longitudinal data of approximately 4,000 children who contribute at least four consecutive observations to the German Socio-Economic Panel (SOEP), I apply sequence analysis techniques to derive typical child poverty trajectories. The results show how these child poverty measures complement each other across the life course and which typical poverty patterns exist among German children. Particularly, I show differences in the severity of poverty trajectories, with some children being poor on one poverty measure only, while others experience multidimensional poverty. Further, while trajectories of nonpoverty, singular, and transient poverty are dominant in the sample, a small group of children experiences permanent poverty. This analysis of child poverty trajectories in terms of three components relevant to children - child-specific deprivation, parental employment, and household income - yields a detailed description of the diverse poverty experiences of German children. Such description is the first step in designing targeted poverty-preventing policies at the crossroads between fostering parental employment and increasing the personal resources a child can command through direct child benefits.

TALK 4: Chronic Food Insecurity and Public Food Assistance During the Covid-19 Pandemic in the United States

Presenter: Noura Insolera, University of Michigan

In 2021 in the United States (U.S.), 10.2 percent of households (13.5 million households) were food insecure, meaning that they did not have the resources to provide enough food for their entire family. The Supplemental Nutrition Assistance Program (SNAP) is the largest federal food assistance program that aims to improve nutrition and food security among low-income people in the U.S. Using data from the Panel Study of Income Dynamics (PSID), a nationally representative household panel study of families in the U.S. collected since 1968, this study examines chronic food insecurity leading up to, and through the beginning of, the Covid-19 pandemic. In response to this public health emergency, national and state level changes were made to SNAP, by relaxing the rules for eligibility and increasing the number of benefits to those enrolled, but until the final PSID-2021 data are released (Spring/Summer 2023) the impact on these changes for families longitudinally is unknown. Preliminary results from early release data files show that though cross-sectional estimates show similar stability in national trends for overall food insecurity rates during this time period, chronic food insecurity is increasing over this time period. This means that more families are remaining food insecure for longer stretches of time, even before the pandemic began. By looking at the policy changes during this period, along with the timing of interviews, it will be possible to see whether ease of enrolment or an increase in benefits had a positive association with improved food security status. By utilizing the longitudinal nature of this study along with the specialized Covid-19 module collected in 2021 it will be possible to parse out these specific connections with proper temporal order.

TALK 5: Childhood Abuse, Intimate Partner Violence in Young Adulthood and Welfare Receipt by Midlife

Presenter: Pascale Domond, University of Montreal

Studies suggest that children abused in childhood are more likely to reexperience subsequent abuse, including intimate partner violence which increases morbidity. The differential association between revictimization in young adulthood and economic outcomes, such as welfare receipt, has not been examined. The objective of this study was to investigate prospective associations between type of child abuse (physical, sexual, both), timing (childhood, young adulthood, both), and welfare receipt into middle age. We conducted a database linkage study using the Quebec Longitudinal Study of Kindergarten Children cohort born in 1980 and government administrative databases (N = 3020). We assessed parental tax returns, family and personal background characteristics (1982-1987). At age 22 years, participants answered retrospective questionnaires on experienced childhood abuse (physical, sexual abuse < age 18 years) and intimate partner violence (IPV) (ages 18-22). Main outcome was years on social assistance, based on participant tax returns (ages 23-37 years). Of 1690 participants (54.4% females) with available data, 22.4% reported childhood abuse only, 14.5% IPV only, and 18.5% both. Prevalence of childhood physical, sexual, and both was 20.4%, 12.2%, and 8.3%, respectively. Adjusting for socioeconomic background and individual characteristics, we found that childhood physical abuse alone and physical or sexual abuse combined were associated with a two-fold risk of welfare receipt, as compared to never-abused (adjusted incidence risk ratio 2.43, 95% confidence interval [CI], 1.65-3.58; and adjusted incidence risk ratio 2.04, 95% CI, 1.29-3.23, respectively). Repeated abuse (childhood abuse combined with adult IPV) had a three-fold risk (adjusted incidence ratio 3.59, 95%CI, 2.39-5.37). With this study, we provide the first prospective evidence, using government administrative databases, indicating that individuals reporting both childhood abuse and adult intimate partner violence victimization are at higher risk for long-term welfare support needs in adulthood compared to never abused.

1F INDIVIDUAL PAPERS (LATER LIFE 1)

TALK 1: Are Values Stable Throughout Adulthood? Evidence from Two German Longterm Panel Studies

Presenter: Klaus Boehnke, Constructor University

Co-authors: Adrian Stanciu, GESIS; Regina Arant, Constructor University; Oscar Smallenbroek, European University Institute
Contrary to the consensus in the literature, people's values continue developing in adulthood, albeit at a slower pace than in prior developmental stages. Previous studies have used either cross-sectional or short-term longitudinal data resulting in a truncated view of a phenomenon unfolding across the lifespan. For this paper we identified long term longitudinal data sources and showed based on a series of confirmatory MDS that the data can be unified under Schwartz' Theory of Basic Human Values (Study 1). We examined value development using latent growth models in a convenience sample of highly educated German peace activists (Study 2) and corroborated these with evidence from a representative sample from the German population (Study 3). We find that all values change up to age 40 in a manner largely consistent with theoretical expectations. We observe that with age self-transcendence and conservation values increase while self-enhancement values decrease. At the same time, we find a curvilinear pattern for openness to change in Study 2 and an overall decrease in Study 3. Moreover, the developmental trajectory of conservation and of self enhancement in the German general population differ between those with tertiary and without tertiary education. We discuss the implication of the present findings for research on value development and for interventions.

TALK 2: Are the Grandparents Alright? The Health Consequences of Grandparental Childcare Provision

Presenter: Emma Zai, Max Planck Institute for Demographic Research

Co-authors: Peter Eibich, Université Paris Dauphine-PSL

This paper examines the causal effect of childcare provision on grandparents' health in the US. We propose the sex ratio among older adults' children as a novel instrument for grandparental childcare provision. Our instrument is rooted in the demographic literature on grandparenthood and exploits that parents of daughters transition to grandparenthood earlier and invest more in their grandchildren than parents of sons. We estimate 2SLS regressions using data from the Health and Retirement Study. The results suggest that childcare provision is not beneficial for grandparents' health and may even be detrimental for physical functioning and subjective health.

TALK 3: Neighbourhood Characteristics and Loneliness in Later Life

Presenter: Jack Lam, University of Queensland

Co-author: Janeen Baxter, University of Queensland

Loneliness among older adults has received increased attention in recent years. Much research focussed on individual correlates, as well as how changes in circumstances, including union separation or widowhood, may relate to changes in loneliness. Increasingly, there is acknowledgment that loneliness may be shaped by the broader social environment, with research highlighting how characteristics of the neighbourhood relates to loneliness of older adults. This paper presents new longitudinal analyses of associations between neighbourhood and loneliness in older adults. It uses four waves of data from the Households, Income, and Labour Dynamics in Australia survey, with geocoded information on residential locations of respondents. These data provide individual measures of neighbourhood sociality and conditions, as well as enabling development of aggregate measures of sociality and conditions comprised of assessments from multiple respondents within the same geographic unit. Our analyses compared association of individual and aggregate measures of neighbourhood characteristics with loneliness. We also examined how within- and across-individual variation in neighbourhood characteristics is associated with variations in loneliness. Randomeffects models demonstrate across respondents, both individual and aggregate reports of neighbourhoods are significantly associated with older adults' loneliness. Fixed-effects models however show that while within-individual assessments of the neighbourhood is associated with variations in loneliness, variations in aggregate reports is not associated with variations in loneliness. This suggests changes in loneliness within older adults are more sensitive to changes in their perceptions or experiences in their neighbourhood than 'objective' changes in the neighbourhood. This suggests improving conditions and sociality of the neighbourhood does not necessarily reduce loneliness amongst older adults. They may still be socially excluded, due to a variety of reasons. This has implications for social interventions and neighbourhood planning goals to improve social wellbeing. Some groups may benefit more than others from neighbourhood planning developments with outcomes likely heterogenous across groups.

TALK 4: The Long Arm of Childhood Hypothesis and Systematic Low-Grade Inflammation: Evidence from Parental Education of Older European Adults

Presenter: Hannah Horton, Munich Center for the Economics of Aging

Childhood SES has been extensively studied as a predictor for health outcomes in adulthood, though the direct mechanisms remain unclear. The Long Arm of Childhood Model hypothesizes that this process is a chain of events, moderated by numerous factors such as family economic status and environment, health behaviors, as well as biological processes. We expand on this model with objective measures of health in older age, namely C-reactive protein (CRP), as chronic low-grade inflammation, which has been found to be connected to both childhood SES as well as a number of cardiovascular diseases in adulthood. Using life history data from SHARE, as well as a novel dried blood spot dataset, we explore the protective role of parent education on the blood level of C-reactive protein in adulthood. Estimating a stepwise linear regression model, we find evidence that years of parental education are negatively associated with CRP in adulthood, with a one-year increase in mother's (father's) years of education decreasing adult CRP by 1.8% (1.1%). Using a modified Sobel test, we measure both the direct and indirect effects,

estimating the extent in which later-life mediators significantly alter the relationship between parental education and CRP. While father's education is completely mediated by individual factors such as respondent's education, employment, and health behavior – we observe a lasting association from mother's education, suggesting a direct link between mother's education and CRP in adulthood.

TALK 5: Leisure Engagement and Experiences of Aging in Older Adults in the US: An Outcome-Wide Longitudinal Analysis of the Health and Retirement Study

Presenter: Jessica Bone, University College London

Co-authors: Feifei Bu, Daisy Fancourt, University College London; Jill K. Sonke, University of Florida

Background: With unprecedented growth in the number of older adults, identifying ways to ensure people stay healthy is a priority. There is increasing interest in referring older adults to leisure activities to support their health through social prescribing. However, the potential benefits of leisure engagement remain unclear. We took an outcome-wide approach to explore whether leisure engagement was associated with experiences of aging across seven domains.

Methods: We included 8,893 older adults (mean age=63.18) from the Health and Retirement Study, a nationally representative cohort of adults aged 50 and over in the US. We measured frequency of participation in physical, creative, cognitive, and community activities in 2008/2010. We assessed aging experiences in 2008/2010 and 2016/2018 with 23 outcomes across seven domains: daily functioning, physical fitness, long-term physical health problems, heart health, weight, sleep, subjective perceptions of health. This outcome-wide approach is less subject to bias, useful for comparing effects, and has higher policy relevance than traditional methods. We tested concurrent and longitudinal associations between leisure engagement and aging experiences.

Results: More frequent physical activity was associated with more positive experiences in all domains concurrently and with all domains except heart health eight years later. Engaging in creative activities was positively related to experiences in most domains concurrently, and daily functioning, physical fitness, sleep, and subjective perceptions of health longitudinally. Cognitive and community activity engagement were less consistently related to aging experiences.

Conclusions: More frequent engagement in physical and creative activities may prevent decline in important aging metrics, keeping older adults functionally independent for longer. Our findings demonstrate the importance of comparing different domains of leisure. If leisure engagement can be increased through social prescribing, this could enable more equitable experiences of aging and limit increasing healthcare costs as the population ages.

2A SYMPOSIUM

Research in Higher Education in Germany: Longitudinal Studies in the Perspective of Institutional Contexts and Reforms

Convenors: Jessica Ordemann, Kolja Briedis, German Centre for Higher Education Research and Science Studies (DZHW)
Research in higher education is inherently interdisciplinary and longitudinal in its perspective. The educational pathway to study begins in the cradle and continues with the choice of the type of university and the subject of study and then ends in the labour market or in the decision to remain in the academic system, to pursue a doctorate or even a professorship. On this long educational pathway, multiple factors influence one's performance and decisions, and institutional changes due to the implementation of reforms shape possibilities in higher education. Over the last decades, more data have become available for researchers to follow questions that take a longitudinal perspective and follow these individual pathways, and institutional reforms. In our symposium, we bring together interdisciplinary contributions that research a variety of topics in higher education from student aid to returns on subject-specific education, decisions about late career drop out and pathways to professorships. All are — one way or another — stimulated by changes in higher education. These contributions furthermore use a variety of analytical (quantitative) methods and a multitude of higher education data. Thus, we provide an insight into the current research on higher education in Germany and the methods and data sets used.

TALK 1: To Grant or Not to Grant? Lessons in Social Mobility from German Student Finance

Presenter: Frauke Peter, German Centre for Higher Education Research and Science Studies

Co-authors: Barbara Boelmann, Carl Gergs, Heike Spangenberg, German Centre for Higher Education Research and Science Studies

Higher education enrolment and completion rates are generally lower among students from less affluent families and those whose parents did not attend university themselves. One likely source of this phenomenon is the substantial cost associated with higher education in terms of forgone earnings, living expenses, and, sometimes, tuition fees. To address this issue, many countries provide means-tested financial aid to students. However, does it matter whether this aid is offered as an (interest-free) loan or a grant? This paper uses unique and rich DZHW school leaver data to assess the impact of two reforms of student aid in Germany. Whilst the former moved towards an entirely loan-based system in 1983, the latter reversed this decision and reintroduced a partial grant in 1990. Given that people acquire education as long as the marginal (perceived) benefit outweighs the marginal (perceived) cost, these reforms likely had a profound impact on individual decision-making regarding enrolment in higher education. However, these decisions matter not only on an individual level but can also feed through to the macroeconomic level because of their implications for the allocative efficiency of talent. Preliminary results show that the 1983 reform changing to a pure loan decreased the likelihood to enrol in higher education by around 4 percentage points; the results differ substantially by parental background. The reliance on means-tested financial aid amongst those enrolled decreased even stronger by 11 percentage points. To further evaluate the reforms from a perspective of efficient allocation of talent, we also

aim to document changes in ability selection into higher education and alternative career pathways, such as apprenticeship training. University of Cologne, University College London, and Centre for Research and Analysis of Migration (CReAM), barbara.boelmann@uni-koeln.de University College London, and Centre for Research and Analysis of Migration (CReAM), c.gergs@ucl.ac.uk German Centre for Higher Education Research and Science Studies (DZHW), peter@dzhw.eu German Centre for Higher Education Research and Science Studies (DZHW), spangenberg@dzhw.eu

TALK 2: Subject-Specific Higher Education Gender Wage Gap in Germany, 1993-2013

Co-presenters: Fabian Trennt, Jessica Ordemann, German Centre for Higher Education Research and Science Studies Germany has experienced a tremendous expansion of higher education (HE) over the last decades. Especially women increasingly obtained a HE degree since the 1960ies. On the one hand, a growing share of HE graduates reflect a change of demand in advanced skills due to technological progress. On the other hand, the expansion might have led to an oversupply of graduates and therefore worse returns on higher education. This should especially be true for study subjects that are commonly not perceived as being the driving force of technological change such as humanities or social sciences – subjects that are often studied by women. While most research did not find a negative impact of HE expansion on graduates' labour market prospects in Germany, studies that take a more differentiated view at the level of subjects and gender are scarce. In our study, we ask if HE expansion has an impact on the HE gender wage gap taking into account that field of studies and their associated labour market returns might be influenced differently by technological change. To answer our research question, we use the data of German Centre for Higher Education Research and Science Studies (DZHW)-Graduate Panel Studies of the 1993, 1997, 2001, 2005, 2009 and 2013 graduate cohorts. We run OLS- regressions with real hourly wages at the first job after graduation as dependent variable and interaction of cohort and gender as main independent variable. We find rising wages over nearly all subjects for women and men between 1993 and 2013 with a sharp decline in 2005 and an increase in the gender wage gap after 2005. The HE gender wage gap in our study is mostly driven by graduates of STEM-fields. However, apart from the last cohort, women with a degree in natural sciences have caught up with their male counterparts. German Centre for Higher Education Research and Science Studies (DZHW), trennt@dzhw.eu German Centre for Higher Education Research and Science Studies (DZHW), ordemann@dzhw.eu

TALK 3: Is Staying in Academia (Too Long) a Problem?

Presenter: Kolja Briedis, German Centre for Higher Education Research and Science Studies (DZHW)

Scientific careers in Germany follow the "up or out" principle. Permanent careers in the science system are almost exclusively possible if a professorship is achieved, as permanent positions below this level hardly exist. Many young researchers already leave the science system immediately after their doctorate anyway. However, the longer they stay in the science system - according to a frequently expressed assumption - the more difficult it becomes to switch to other areas of employment. However, this assumption has not yet been empirically refuted or proven. Theoretically, both assumptions can be justified. On the one hand, the segmentation theory can be used to hypothesize that a long career within the science system has led to the acquisition of a qualification in an occupationally specialized labour market, which is then forfeited by a switch to other fields. On the other hand, based on the signal theory, it can be argued that a high level of formal education (in this case the doctoral degree) nevertheless pays off because the certificate is a signal for a generally high level of productivity from the employer's perspective. The paper uses data from the DZHW panel of doctorate holders to analyse whether and to what extent remaining in academia for a longer period has a negative impact on one's professional situation when switching sectors later on. The analyses show that doctoral graduates who leave the science system immediately after graduation are particularly successful in their careers. However, especially this group seems to do a doctorate primarily because they have high ambitions. German Centre for Higher Education Research and Science Studies (DZHW), briedis@dzhw.eu

TALK 4: Career Paths to Professorship in Germany: A Classification and Description of Critical Factors

Presenter: Jasmin M. Kizilirmak, German Centre for Higher Education Research and Science Studies
Co-authors: Lisa-Marie Steinkampf, Ulrike Schwabe, Frauke Peter, Sandra Buchholz, German Centre for Higher Education
Research and Science Studies

Germany has undergone significant structural and cultural changes in the qualification of scientific personnel and the design of scientific career paths over the past two decades. The introduction of the junior professorship and the more recent introduction of tenure-track professorships were intended to provide young researchers with a secure career path, but junior professorships have often been offered without tenure track, raising questions about their impact. However, data on professorial careers are still lacking. In response to this gap in knowledge, we present the baseline assessment of a longitudinal survey study called the prof*panel, which aims to provide a quantitative database for research on academic careers from the time of appointment to a professorship in Germany, recognizing the diversity of access routes to professorships that exist today. Based on a sequencecluster analysis, we offer a typology of career paths to reaching a first full professorship (tenured), using our initial sample of N = 2565. Moreover, applying multivariate analyses, we investigate social lines of differentiation, e.g., regarding the influence of gender, scientific field, or positions abroad. Our study provides important insights into the diversity of academic career paths in Germany, laying the groundwork for future research on this topic. By illuminating the different routes to professorship and how different factors like the academic field, number of publications, but also gender and parenthood affect the time it takes from PhD to full professorship, our findings can inform policy decisions aimed at improving academic career paths in Germany and other countries facing similar challenges. German Centre for Higher Education Research and Science Studies (DZHW), kizilirmak@dzhw.eu German Centre for Higher Education Research and Science Studies (DZHW), steinkampf@dzhw.eu German Centre for Higher Education Research and Science Studies (DZHW), schwabe@dzhw.eu German Centre for Higher Education Research and Science Studies (DZHW), buchholz@dzhw.eu

2B SYMPOSIUM

Unpaid Caregiving for Friends and Families with Health Issues: Family Trajectories and Consequences Over the Lifecourse

Convenor: Klara Raiber, Radboud University

With populations aging a higher proportion of people with health issues will be in need of care in the future. In many contexts, family members or friends are relied on to provide the necessary care, the so-called informal, family, or unpaid caregivers. This type of caregiving can occur throughout the complete life course of a person (at a young or older age), for short or longer periods, and for one or multiple people, making the life course approach the ideal framework to understand the different trajectories and consequences of caregiving. In this symposium, we start by describing caregiving and family trajectories over the life course (presentations 1 and 2). Next, we look at the potential consequences of caregiving such as cognitive functioning (also presentation 2), overall health (presentation 3), and the impact of care policies on solidarity and autonomy (presentation 4). We consider different European contexts including a country comparison with all contributions including a time perspective as a longitudinal approach to caregiving is inevitable to disentangle the order of relationships of this selective group of people who care.

TALK 1: A Life-Course Perspective on Gendered Work-Care Trajectories

Presenter: Ayşegül Güneyli, Radboud University

Co-authors: Ellen Verbakel, Katia Begall, Radboud University

This study contributes to our understanding of unpaid caregiving and paid work as path-dependent, dynamic, and gendered processes that unfold across heterogeneous life courses. Given an ever-increasing informal care demand together with high pressures to participate and stay in paid employment, better understanding of how women and men combine work and care throughout extended periods of life is an urgent societal challenge. The aim of this study is to identify and describe joint employment, informal care, and childcare trajectories that emerge in the Netherlands, using a life-course framework. This is done analysing unique retrospective survey data on informal caregiving combined with longitudinal data on employment and childcare, collected by the LISS Panel in the Netherlands (N=4,038). These comprehensive datasets allow for the creation and dynamic analysis of work-care trajectories emerging between the years 1945-2020 and comprising of up to 75 years of individual life sequences. Using multichannel sequence and cluster analyses, we create individual life sequences and cluster them into work-care trajectories. After identifying these trajectories, we use regression models to understand how the likelihood of being in each trajectory differs for women and men, by socio-demographic characteristics, and over time taking an intersectional approach. While we expect that trajectories dominated by caregiving are disproportionately followed by women, the extent to which these are gendered is likely to vary by socio-economic status and migration background.

TALK 2: Staying Sharp: How Work-Family Life Courses Shape Later Life Cognitive Functioning Across Pension- and Family Regimes in Europe

Presenter: Ariane Bertogg, Ludwig Maximilian University of Munich

Co-authors: Giulia Tattarini, University of Hamburg; Damiano Uccheddu, Catholic University Louvain-la-Neuve

In most Western countries, cognitive decline in later life has become a major epidemiological challenge. Later life heterogeneity in cognitive levels is not random but rooted in the accumulation of cognitive and relational "reserves" within and across different life course domains. So far, little research has investigated how joint work and family trajectories are associated with cognitive functioning in later life, and this particularly applies to gender- or context-specific links. Welfare policies with regard to extending working lives and work-family reconciliation are highly gendered and likely shape the opportunities for accumulating both types of reserve. Moreover, they may buffer against life course risks arising from discontinuous careers or non-standard families. In this contribution, we thus ask:

- (1) To what extent are work-family life courses associated with cognitive functioning in later life?
- (2) How do the associations between work-family life courses and cognitive functioning vary across (de-)familiarisation and pension regimes?

Our analyses were based on seven waves from the Survey of Health Ageing and Retirement in Europe (SHARE), and the two-retrospective life-course interviews. We focus on Sweden, the Netherlands, Italy, and France, as these four countries represent unique constellations of family policy regimes and pension regimes. Based on multichannel sequence analysis with attached cluster analysis, we identify eight distinct patterns of work-family life courses for men, and eleven for women. These ideal-typical life courses are differently associated with levels of cognitive functioning. Moreover, the associations between life courses and cognitive functioning exhibit both gender- and context-specific patterns. Despite such variation, we consistently find that, on average, individuals with precarious family situations (such as single parenthood) or employment biographies (such as discontinuous careers, or long absence from the labour market) do worse regarding cognitive functioning.

TALK 3: Unpaid Caregiving and Health: Fixed-Effects Analysis of Longitudinal Biomarker Data

Presenter: Patrick Präg, CREST/ENSAE

Co-authors: Klara Raiber, Radboud University; Ariane Bertogg, Ludwig Maximilian University of Munich

As populations get older and informal caregiving to those will health problems becomes more widespread, the health consequences of providing care are becoming a key concern for societies. Sociological theories of stress appraisal and role strain posit detrimental consequences to the health and wellbeing of caregivers. Conversely, enhancement theory holds that caregiving can have positive consequences. Using long-running panel data from the English Longitudinal Study of Aging (ELSA, 2002–19, N \approx .10, 000) and fixed-effects models, we offer a new perspective on the health consequences of caregiving. Focusing on changes

in health and including biomarker-based measures, we can disentangle the actual health consequences of caregiving from selection effects (e.g., those with health issues providing (more) care and genetic similarity with care recipient).

Results show that caregiving goes along with better self-rated health but not with improved biomarker-based allostatic load. Women engaged in high-intensity caregiving also do not report better health. Our findings provide tentative support for enhancement theory, suggesting that caregivers at least feel healthier, even if a biomarker-based health outcome can't corroborate that. Future analyses will distinguish between the consequences of transitioning into and out of caregiving by means of asymmetric fixed-effects models.

TALK 4: What Effect Do Dutch Social Care Policies Have on Informal Care Relations Over Time? The Consequences for Solidarity and Autonomy

Presenter: Gita Huijgen, Erasmus University Rotterdam Co-author: Tom Emery, Erasmus University Rotterdam

Like most welfare states, the long-term care system in the Netherlands has undergone drastic changes over the past two decades. Decentralizations in 2007 and 2015 have made Dutch municipalities responsible for social care provision and informal care support. Due to the municipalities' policy discretion and a national budget reduction in 2015, the scope and generosity of social care policies may vary geospatially and over time, resulting in different levels of support for informal caregivers and care recipients. This may in turn affect the degree of (1) solidarity and (2) autonomy exhibited by both caregiver and care recipient, two key elements underlying ambivalence in care relations, which negatively relates to psychological well-being. While earlier research shows that long-term care policies may shape informal care in terms of its prevalence, intensity and impact, the influence on autonomy, especially for informal caregivers, is largely neglected. The case of the Netherlands may therefore serve as a natural experiment which helps to uncover the extent to which municipal social care policies have an influence on solidarity and experienced autonomy within the social context of people in need of long-term care from 2007-2020. Because higher levels of public care and support may be especially beneficial to those who typically provide or receive informal care, we will also examine to what extent gender, poverty and migration background affect the relationship between local care policies on the one hand and solidarity and autonomy on the other. To this end, we will analyse data from SHARE linked to registry data, which indicates the generosity and up-take of social care services.

2C INDIVIDUAL PAPERS (HEALTH IN ADOLESCENCE)

TALK 1: Social Position, Social Connection in Adolescence, and interpersonal Trust: A Preliminary Theory and Analysis Presenter: Richard Layte, Trinity College Dublin

Relatedness' is a core human need and research increasingly shows that the quantity and quality of social relationships contributes substantially to a person's mental and physical health. Yet research also shows that individuals who are disadvantaged in terms of social and economic position (SEP), and particularly those experiencing poverty and economic deprivation, have a lower quality and quantity of social relationships (Mood and Jonsson 2016). This patterning to social relationships begins early in life and is well established by adolescence: young people in families experiencing low income and poverty are more likely to have conflictual relationships with parents, to report less friendships overall, to perceive peers as less supportive and have a higher probability of both being a victim of and a perpetrator of bullying than young people from more advantaged households. The pattern of disrupted relationships is repeated with teachers where relationships are more likely to be antagonistic and less warm. The reduced availability of connection and social support in adolescence may be one reason why there is a well-established relationship between SEP and professed interpersonal trust across societies (Delhey and Dragolov 2016, Layte 2012). SEP and low interpersonal trust are strongly associated with less social participation in civic groups and organisations (Böhnke 2008, Dahl, Flotten and Lorentzen 2008, Levitas 2006) but longitudinal research shows that those who trust join civic associations and not the reverse (Claibourne and Martin 2000; Uslaner 2002). This paper investigates whether the patterning of social relationships in early life structures attitudes of interpersonal trust. We use longitudinal child cohort data (Growing Up in Ireland) and latent class analysis to identify groups who vary in their relationship patterns at age 13 and show how these patterns predict levels of interpersonal trust at age 17/8 adjusting for personality and other individual and family level confounders.

TALK 2: Use of Pornography and Sexual Health and Wellbeing in Young Adulthood: Evidence from Growing Up in Ireland (GUI)

Presenter: Anne Nolan, Economic and Social Research Institute Co-author: Emer Smyth, Economic and Social Research Institute

Sexual activity is an important component of physical and mental health and wellbeing. The period from adolescence to early adulthood involves major transitions in social and economic life, as young people move from dependent child towards stronger peer affiliation, develop intimate partner relationships, move out of the family home, and transition from primary through second level school to further education and employment. These transitions are accompanied by new health, social and personal behaviours, and these patterns of behaviour often track into adult life. Exposure to pornography can influence youth sexual attitudes, which, in turn, can impact their sexual behaviour and socio-emotional wellbeing (Andrie et al., 2021; Dooley et al., 2019). In this paper, we use data from the '98 Cohort of Growing Up in Ireland (GUI) to examine the determinants of use of pornography at age 20, and the extent to which use of pornography interacts with sexual health behaviours (e.g., use of contraception) at age 20. The '98 Cohort of GUI have been interviewed on five occasions since the age of 9 (age 9, 13, 17, 20 and 22). Data on risk and protective factors such as family socioeconomic background, parent, peer and intimate relationships, timing and sources of information about sex and relationships at age 20 (and earlier ages) are examined. At the age of 20, almost two-

thirds (64 per cent) of males from this cohort reported using the internet for pornography (compared to 13 per cent of females). The findings from this research have important implications for policy development, in particular for the National Sexual Health Strategy. The Strategy adopts a life course approach to sexual health which acknowledges the importance of developing healthy sexuality throughout childhood and adolescence and builds on that foundation for positive sexual health and wellbeing into adulthood and older age.

TALK 3: No Sex, No Partner, No Kids: Adolescent Precursors and Adult Attitudinal Correlates of Social Isolation in Midlife

Presenter: Michal Kozák, University of Oslo

Co-authors: Willy Pedersen, Tilmann von Soest, University of Oslo

In recent years, Western societies have seen a significant decrease in fertility rates, an increase in long-term singlehood, and a rise in the proportion of sexually inactive population. These phenomena are interrelated, making it pertinent to identify common factors that lead to social isolation across all these domains. Furthermore, concerns have been raised about politically extremist, violent, and misogynistic beliefs harbored by socially isolated individuals, particularly young men. To address these issues, this study aims to identify adolescent factors that predict social isolation in domains of sexual activity, partnership, and family formation in midlife, as well as to investigate how is social isolation associated with socio political attitudes related to political extremism. The study uses longitudinal survey data from the population-wide study of Norwegian adolescents, Young in Norway (1992- 2020; N = 2,052). Preliminary results indicate that lack of dating in high school, substance use, and conduct problems are the main factors that increase the likelihood of social isolation three decades later. While social isolation in midlife is associated with lack of social trust among women, it is also linked to conspiracy thinking, opposition to immigration and opposition to gender equality for men. Policy implications of the findings and possibilities for early interventions are discussed.

TALK 4: Is Residence in an English Coastal Community in Adolescence Associated with Adverse Health Outcomes Over the Next 10-Years?

Presenter: Emily Murray, University College London Co-author: Stephen Jivraj, University College London

The Chief Medical Officer (CMO) for England's 2021 report highlighted that coastal communities have some of the worst health outcomes in England. Well-established literature shows that where you grow up plays a role in adulthood health, but there is scant research on effects of coastal areas specifically. For this analysis, UK Household Longitudinal Study participants aged 15 at each wave, or closest available age, were linked to coastal community classifications. In brief, 2011 lower-super output areas (LSOAs) were deemed "coastal" if they included or overlapped built-up areas which lay within 500m of the "Mean High Water Mark". Each youth was then followed up for up to ten waves, for five adult (age 16+) health outcomes. The analysis included fitting associations of health outcomes with living in a coastal community in adolescence using regressions models with fixed effects at the individual and study wave, adjusting for clustering of individuals within LSOAs and longitudinal study weighting. We also tested for effect modification between coastal community and area deprivation (Townsend index), through fitting interaction terms to models. Of 11,814 youth who resided in England, a total of 5,269 had complete covariate and follow-up health data (n=19,594 observations). There were no associations between Coastal town residence in adolescence and self-rated health, GHQ-36 or SF-12 physical health component. For the other two health outcomes, there was evidence that area deprivation modified associations. After adjustment for age, gender and household income, adolescents who resided in the most deprived Coastal LSOAs had average adult SF-12 MCS scores 5.2 points lower (95% CI: -7.9, -2.5), and adolescents in the most deprived Inland LSOAs had scores 1.7 points higher (0.8, 2.5), than adolescents who had lived in the least deprived quartile of LSOAs that were Inland. The same pattern was seen for odds of a health condition.

TALK 5: Constancy of Self-Attitudes from Adolescence to Mid-Life: Does Change Become More Durable or Transient with Age?

Presenter: Jeylan T. Mortimer, University of Minnesota

Co-authors: Monica Kirkpatrick-Johnson, Washington State University; Xiaowen Han, University of Minnesota

The extent to which people hold stable ideas and attitudes throughout their lives is a persistent concern among scholars across social science disciplines. Developmental processes early in life are widely considered to lay the groundwork for future attitudes, well-being, behavioural adaptation, and attainment. However, little is known about the degree to which central components of the self-concept manifest persistent change, or simply short-term fluctuations around a stable baseline, through stages of the life course. The present study examines key self-related orientations as participants in the (U.S.) Youth Development Study moved from adolescence to mid-life over a 30-year period. We apply an analytic method recently employed by Kiley and Vaisey (2020) to study adult civic and political attitudes, to examine a range of self-attitudes, including self-esteem, self-efficacy, depressed mood, well-being, and extrinsic and intrinsic work values. Whereas most analysis of stability and change is based on correlational stability, which taps whether individual attitudes remain stable relative to others in the sample, this method focuses on intraindividual change and stability. We find evidence that persistent change, or "active updating" in self-orientations occurs during adolescence and young adulthood; stability, or "settled disposition," is manifest once adulthood has become established and continues through mid-life. These patterns appear to be relatively impervious to problematic life circumstances. Moreover, our robustness checks show that the distinctive patterns of change and stability—updating in adolescence and youth, followed by settled disposition in adulthood---are demonstrated despite unequal numbers of data points within stages and differential lengths of time between them. With very limited exception, these stage-specific patterns also characterized both the entire panel and a restricted sample that removed those who attritted by the third stage (of established adulthood).

2D INDIVIDUAL PAPERS (SCHOOL-TO-EMPLOYMENT 2)

TALK 1: Can Short Training Programmes Help to Integrate Young Welfare Recipients with Disrupted School-to-Work Transitions into the German Labour Market?

Presenter: Tamara Pongratz, IAB - Institute for Employment Research

Getting into vocational training after leaving school is crucial for later labour market outcomes. This is especially true for Germany with its Vocational Education and Training system, which is highly connected to the labour market. Thus, failing the first step in the school-to-work transition (STWT) can exclude individuals from specific occupations and lead to long-lasting scarring effects over the whole life course. Following the arguments of human capital theory, people with such STWT failures may lack human capital and thus have rather low productivity levels. According to signalling theory, such disruptions further send negative signals of applicants' trainability and productivity to potential employers. Relying on these two theories, people with more problematic STWTs likely show more disadvantages in their labour market integration. The question therefore arises whether policy activation measures can (re-) integrate young unemployed welfare recipients into the German labour market once they suffer from detrimental consequences after failing the first transition step. The activation measures of interest are short training programmes that aim at increasing the participants' employability and take place either as classroom training or within firms. Using administrative data and matching methods, this paper analyses whether unemployed welfare recipients benefit from participation by increased probabilities of regular employment and vocational training. The results show that particularly participants with prolonged transitions benefit from classroom training. In-firm training performs remarkably better, yet they increase employment prospects the most for participants with smooth transitions. In contrast, participation in in-firm training increases vocational training rates especially for welfare recipients with disrupted transitions. The programmes thus seem to support participants in the current step they have to take in their labour market integration. Lastly, women benefit more from participation compared with men. Participation thus seems to decrease gender differences in employment and vocational training rates at least temporarily.

TALK 2: Adolescents' Work Values in the School-to-Work Transition: Influences of Social Background on Their Change and Fulfilment

Presenter: Annalisa Schnitzler, BIBB - Federal Institute for Vocational Education and Training

Co-author: Silvia Annen, University of Bamberg

Social background influences German adolescents' opportunities to gain high-level school-leaving certificates. Social selectivity continues in initial vocational education and training (VET), as a strong correlation exists between high-level school-leaving certificates and training occupations with a higher social prestige. Thus, the individual social background indirectly influences the transition into initial VET via school-leaving certificates (Beicht & Walden, 2015). We examine whether social selectivity also exists with regard to young people's work values, i.e., the importance placed on different job characteristics (Mortimer & Lorence, 1979; Johnson, 2001), as research revealed associations between family SES and different work values (e.g., Johnson, 2002). We refer to the two major value dimensions that have repeatedly been identified in the literature, extrinsic and intrinsic values (Mortimer & Lorence, 1979), for investigating 1. differences in work values according to social background and 2. factors besides social background that determine individuals' ability to realize the fulfilment of their work values in their current job. We use data from three waves of starting cohort 4 of the German National Educational Panel Study (NEPS) (see Blossfeld & Roßbach, 2019). 7,000 pupils in grade 10 rated a number of work values with regard to personal importance. Four years later, after having started or already finished initial VET, this rating was repeated. Another three years later, the work values were presented again to the respondents but this time to assess the degree of fulfilment of these aspects in the current job. We use t-tests to compare the rating of values and value fulfilment respectively according to different aspects of parental background and between waves. Subsequently we conduct linear regressions to investigate whether further socio-demographic variables and characteristics of participants' jobs have an effect on the degree of value fulfilment. We then repeat the regressions for objective outcomes like income.

TALK 3: A Question of Security? Educational Expansion, Labor Market Uncertainty, and Family Formation

Presenter: Christian Brzinsky-Fay, WZB Berlin

Co-author: Ana Karalashvili, Humboldt University Berlin

The study examines the impact of increased educational participation and decreased labour market stability on the transition to parenthood in the context of the low fertility regime in Germany. In contrast to previous studies that focus on employment precarity centred around the time of childbirth, this study employs a longitudinal perspective by measuring sequence turbulence of employment instability, considering present circumstances and past experiences. Using retrospective life course data from the National Educational Panel Study of men and women from Western Germany, born between 1944 and 1986 (N=9699), the study analyses the duration until the first birth throughout 20 years after leaving school. The Event History Analysis reveals that women with more turbulent labour market trajectories experience earlier transitions to parenthood across all cohorts and regardless of the level of education. The effect is strongest among women with the lowest level of education, and weakest – among highly educated women. The study identifies no effect of employment turbulence in the case of transition to parenthood among men. These findings highlight that family formation may serve as a gendered alternative to labour market attachment to attain security, especially, among women with lower educational credentials. Lastly, the study finds that the cross-cohort variation in the timing of entering into parenthood is a function of prolonged schooling, suggesting that education plays a crucial role in shaping family formation patterns. These findings provide insights into the complex interplay between education, employment, and family formation and emphasize the need of going beyond static measures of precarious work.

TALK 4: Life Trajectories of the 'Forgotten Fifth'

Presenter: Lee Elliott Major, Exeter University Co-author: Sam Parsons, University College London

Successive Governments have failed to address an issue that continues to plague the British education system: many teenagers leave secondary school without the 'expected standard' of a grade 4 pass in GCSE English language and maths, which acts as an effective passport to positive post-16 transitions. We use the UK Millennium Cohort Study (MCS) to assess the academic trajectories of the 1 in 5 (18%) of teenagers in England who did not achieve these two thresholds, and how this influences their early post-16 transitions and wellbeing outcomes. We find that identification of falling below expected standards in pre-school assessment of 'school readiness' (age 3) and in teacher assessment of literacy and number skills at school entrance (age 5) are both highly predictive of failure to attain a grade 4 or higher in GCSE English language and maths at age 16, even after controlling for family background and individual characteristics. Half of pupils who 'fail' at age 16 were judged to be behind at age 5. We conclude that future attempts to improve standards in English and maths will likely only succeed if high quality support is provided during the pre-school years, and teachers are able to identify, diagnose and respond appropriately to children falling behind at early education stages. From here we examine how success or failure in age 16 examinations influences post-16 education transitions and aspirations. Early findings suggest that fewer teenagers who did not attain a grade 4 or higher in GCSE English language and maths were in EET, expected to go to university or aspired to a professional or managerial occupation when interviewed at age 17/18. Looking more widely at their behaviour adjustment we found that more of the teenagers also had behaviour problems and had been stopped and questioned, formally cautioned or arrested by the police.

2E INDIVIDUAL PAPERS (EMPLOYMENT)

TALK 1: The Intergenerational Reproduction of Self-Direction at Work: Revisiting Class and Conformity

Presenter: Kaspar Burger, University of Zurich

Co-authors: Francesca Mele, University of Zurich; Jeylan Mortimer, Xiaowen Han, University of Minnesota

In his classic work, Melvin Kohn hypothesized that variation in parental occupational self-direction plays a central role in the reproduction of social inequality, as the more self-directed parents would socialize their children to also value self-direction and to be prepared for acting autonomously in the workplace. Since self-directed jobs tend to be more extrinsically rewarding jobs (in terms of occupational status and income), parents who have more self-directed work would give their children a leg up in the status attainment process. Children's self-directed orientations and behaviours would equip them well for future self-directed and higher status work. While this hypothesis was clearly articulated in Kohn's now-classic Class and Conformity: A Study in Values (1969), Kohn never tested this important prediction. Nor, to our knowledge, has it ever been fully empirically examined although Kohn's work has sparked considerable interest among social scientists. Our study aims to address this gap. Our main concern is to assess the intergenerational transmission of occupational self-direction. Moreover, we examine whether the quality of parent-child relationships and key motivational resources (intrinsic work values and self-efficacy) of the adult child contribute to the reproduction of social inequality. Using two-generation longitudinal data from the Youth Development Study (N = 1,139) which span over two decades (1988-2011), we estimate a structural equation model to address our research aims. We find evidence indicating that self-direction at work is transmitted across generations. The findings also suggest that parental socioeconomic status contributes to adult children's occupational self-direction by fostering intrinsic work values. Taken together, the results indicate the merit of extending sociological models of intergenerational attainment to include both the selfdirectedness of parental work and intrinsic values in the offspring generation.

TALK 2: A Longitudinal Study of Career Counselling Competence: Focusing on the Analysis of Competency Development Trajectory

Presenter: Peter Yang, National Chiayi University, Taiwan

This study aims to examine the developmental trajectory of career counselling competence among third-year undergraduate students in the context of a Career Guidance and Counselling course. A social constructivist approach was adopted, and feedback, dialogue, and reflection mechanisms were utilised to enhance the students' learning outcomes. The study investigated the developmental trajectory of career counselling competence through longitudinal data analysis and aimed to establish a conceptual framework for effective teaching in the field. Specifically, the study aimed to illustrate how feedback can be tailored to students' reflection processes in different stages of competency development, and how effective dialogue between instructors and students can facilitate continuous competency development throughout the semester. Fifty-two third-year undergraduate students were recruited, and a two-stage data collection strategy was adopted. The study collected quantitative data on students' perceived professional efficacy and professional identity at the beginning, middle, and end of the semester. The data were analysed using repeated measures analysis of variance (RMANOVA) to evaluate changes in these variables over time. Fifteen participants were selected for the qualitative study, which involved semi-structured interviews that lasted for two hours. Thematic analysis was employed to further explore their participation experiences in the course. While the quantitative analysis did not yield significant longitudinal changes, the qualitative findings revealed important themes related to the development of professional efficacy and professional identity over time. Based on the study results, this paper proposes strategies to refine the design of future longitudinal studies and integrate quantitative and qualitative research findings to explore the complex development trajectories of career counselling competencies. The implications of these findings for career guidance and counselling education are also discussed. Keywords: longitudinal study, career counselling competence, competency development trajectory, social constructivist approach, dialogue, reflection, feedback, professional identity, professional efficacy, thematic analysis.

TALK 3: The Interplay of Family Care and Paid Work in Late Careers and its Consequences for Old-Age Security in Germany Presenter: Ulrike Ehrlich, Deutsches Zentrum für Altersfragen (DZA)

Co-authors: Laura Romeu Gordo, Nadiya Kelle, Alberto Lozano Alcántara, Dee Leonie Casal, Deutsches Zentrum für Altersfragen

(DZA)

We examine how the interplay of paid work and family care among midcourse individuals in Germany is linked to individuals' old-age income using sequence, cluster and regression analysis. Family care is defined as caring for an ill, disabled or frail elderly (non-)family member. We add to the literature by adopting a processual life course perspective and by considering the interplay of unpaid care other than childcare and paid work and its' impact on individuals' old-age income. Accordingly, we focus on midcourse employment trajectories and pension points individuals can accumulate from their employment or their long-term family care activities. Detailed monthly information on individuals' employment, family care and earnings trajectories from age 55 to 65 (N=839) stems from the novel SOEP-RV data, a data linkage of the administrative records of the German public pension insurance with the German Socio-Economic Panel (SOEP). In a first step, we identified five clusters of individuals' employment midcourses: cluster 1 is characterized by long periods of full-time employment, cluster 2 by early retirement, cluster 3 by the homemaker status, cluster 4 by part-time employment and cluster 5 by episodes of marginal employment and unemployment. While the first cluster descriptions showed that family caregivers are present in all five clusters, the highest share of family caregivers was found in clusters 2 and 3. Moreover, individuals with longer family care episodes earned fewer pension points than individuals not providing care or individuals providing family care for shorter periods. First regression results indicate that caregivers from the fulltime cluster accumulate less, while those from the homemaker cluster accumulate more pension points compared to their non-caregiving counterparts. However, the pension points accumulated by caregiving homemakers do not guarantee a sufficient old-age security. In a next step we link individuals' work-family midcourses to their individual and household incomes in later life.

TALK 4: The Future(s) of Work? Disparities Around Changing Job Conditions when Remote / Hybrid or Returning to Working at Work

Presenter: Wen Fan, Boston College

Co-author: Phyllis Moen, University of Minnesota

The future of work is ambiguous at best. Despite widespread shifts to remote/hybrid work during the COVID19 lockdown, there is a paucity of knowledge about changing job conditions in tandem with different work locales. Is the move to remote/hybrid work a disrupter or accentuator of existing norms and inequalities? Drawing on nationally representative, four-wave panel survey data (October 2020-April 2022) collected from U.S. workers who spent at least some time working from home since the pandemic onset, we examine effects of within-person changes in where respondents work on changes in job conditions (psychological job demands, job control, coworker support, and monitoring). Estimates from fixed effects models show that, compared with returning to working at work, ongoing remote and moving to hybrid work leads to greater reductions in psychological job demands, especially among older women and men. Black and Hispanic women moving back to the office experience the greatest loss of decision latitude and schedule control. While white workers see increased coworker support when returning to the office, returning Black and Hispanic men report a decline in coworker support. Family caregivers' job conditions do not improve whether remote/hybrid or returning to work. Qualitative data collected from Amazon Mechanic Turk illuminate mechanisms leading to salutary effects of remote work, but also the stress of combining jobs with family care work.

TALK 5: Does Previous Sickness Absence Affect Work Participation After Vocational Labour Market Training? A Difference-In-**Difference Propensity Score Matching Approach**

Presenter: Taina Leinonen, Finnish Institute of Occupational Health

Co-authors: Laura Salonen, Svetlana Solovieva, Elli Hartikainen, Eira Viikari-Juntura, Finnish Institute of Occupational Health; Antti Kauhanen, Etla Economic Research

Reduced work ability is relatively common among unemployed job seekers, and it can hinder future labour market attachment. A commonly used measure to increase employability is the use of active labour market programmes. While especially vocational labour market training (LMT) has been shown to be an effective way to increase work participation among job seekers, there is still uncertainty about how LMT works in different population groups, for example, among persons with a history of work disability. We used nationally representative Finnish register data on 16,062 LMT participants aged 25-59 with a history of sickness absence (SA) and propensity score matched trainees without such a history. For matching, we used information on sociodemographic and work-related factors. We used difference-in-differences analysis to investigate the differences in the changes in work participation before and after LMT between those with and those without SA history. The results show that those with a history of SA had a lower gain in work participation after LMT compared to those without such a history. The magnitude further varied by sex, employment history, and follow-up time. Women with SA history had 3.9-6.2 percentage points lower gains in work participation than those without SA history, depending on the employment history and follow-up year. In men, the corresponding numbers were 2.0-4.3 percentage points. The results were more pronounced if the SA was due to mental disorders. The results indicate that previous work disability, especially due to mental disorders, can hamper work participation after LMT and should be accounted for when planning for employment-enhancing measures.

2F INDIVIDUAL PAPERS (MIGRATION)

TALK 1: Following the Lives of Ukrainian Refugees in Germany: The Role of Early Education and Care Services for Maternal Employment

Presenter: Ludovica Gambaro, Federal Institute for Population Studies (BiB)

Co-authors: Sophia Schmitz, Katharina Spiess, Federal Institute for Population Studies (BiB)

Background: The Russian invasion of Ukraine has irreversibly changed the lives of Ukrainians, and triggered a major migration flow to other countries, with more than a million arriving in Germany. This refugee population disproportionally includes women and children, making access to childcare and education services a pressing policy priority. The link between enrolment in early education and care services and maternal employment has been a long-standing theme of life-course research, which has documented the long-term effects on children's development and on mothers' earnings trajectories.

Methods: This paper examines a large representative sample of Ukrainian refugees in Germany, drawing on the first two waves of the Refugees from Ukraine in Germany study (IAB-BiB/FReDA-BAMF-SOEP Survey) and on the third wave which will be conducted in June 2023 by the Federal Institute for Population Research (BiB). The paper traces the evolution of children's accessing early education and care services and the parallel employment trajectories of their mothers during their first year in Germany. The data supply a good array of controls for confounding variables, such as maternal education, family structure and occupational status before migration, which may affect labour market participation. In addition, the analysis exploits variations in the geographical location of refugees and the concurrent differences in the availability of service to better understand whether higher accessibility to early education and care services can facilitate maternal employment.

Results: Preliminary results indicate a slight upward trend in both children's enrolment in early education and care and in maternal employment and point to a strong and robust correlation between the two.

Conclusions: There is support to the notion that early education and care can be effective in supporting mothers' paid work, even among a population of recently arrived refugees.

TALK 2: Social Background, Mental Health and the Labor Market Integration of Young Syrian Refugees in Germany Presenter: Hans Dietrich, Institute for Employment Research (IAB)

From a longitudinal perspective, this paper sheds light on the effects of SES and mental health, and their interactions, on the integration of young Syrian civil war refugees into the German labour-market. As the civil war situation might limit direct SES effects on offspring's attainment in Germany, we consider educational aspirations and educational attainment as possible indirect SES mechanisms. As the majority of these individuals have experienced violence in various ways, PTSD is addressed as a second mechanism affecting individuals' labour-market integration. We employ unique survey data, including 2.732 young Syrian refugees, who were interviewed for a first time in 2016, immediately after they received clearance to enter the German labour-market. The survey data are perfectly matched with register data, which document the labour market status of the respondents from 2016 to 2021. Linear regression models are applied, and predictive marginals calculated to present results for the effect of PTSD and SES on refugees' labour-market integration. In line with the literature and the limited opportunities for direct SES transfers to the offspring in case of forced migration, we found only weak direct SES effect on occupational outcomes. However, respondents educational background and educational aspirations work as significant indirect SES effects, which shape respondents labour-market integration. As a second mechanism, we identify mental health (PTSD) at arrival time. Symptoms of posttraumatic stress disorder (PTSD) take a systematic and even growing effect on individuals labour-market integration over

TALK 3: Do Entry Pathways Matter for the Employment of Humanitarian Immigrants? Asylees and Refugees in Australia

Presenter: Janine Baxter, The University of Queensland

time. Additionally, we found significant interaction-effects between SES and PTSD.

Co-author: Rennie Lee, The University of Queensland

As the third largest resettlement country for refugees, Australia represents a potential home for refugees. While Australia has a long history of resettling refugees, refugee integration specifically their employment outcomes has long been a focus in public debates and politics with much confusion about refugees and asylum seekers. While both groups are broadly received under Australia's Humanitarian program, the two groups vary widely in their experiences both prior to and upon arrival in Australia, including access to rights and entitlements. Refugees apply for a humanitarian visa outside Australia that provides a pathway to permanent residency and settlement assistance. Asylum seekers typically apply for protection after arriving in Australia on a temporary visa, such as a tourist or student visa, or without any visa, also referred to as unauthorized individuals. They encounter a particularly punitive approach that is designed to discourage undocumented migration that includes indefinite mandatory detention without valid visas until their refugee status is determined and long periods of uncertainty and temporary status. Given these differences in premigration and postmigration experiences, this study asks the following questions: do refugees and asylees differ in their labour market outcomes immediately after securing permanent residency? Do these disparities persist five years after permanent residency? Using data from the Building a New Life in Australia, we find that immediately after securing permanent residency, asylees are more likely to be employed than refugees, net of controls. However, after five years as permanent residents, we find that this is no longer the case with no difference in employment between refugees and asylees. This partially reflects the lower starting point of refugees immediately upon arrival. It also reflects the large gains that refugees make immediately after arrival. It is likely that asylees initially benefited by having more time in Australian and greater local labour market knowledge.

TALK 4: Intergenerational Relationships in Low Status Migrant Families: Curse or Blessing for Social Mobility?

Presenter: Juan Deininger, University of Hamburg Co-author: Petra Böhnke, University of Hamburg

When analysing social mobility, the family and family resources play a central role. While previous research on social mobility mainly focused on contextual factors like living conditions, education, (non)family networks and the parents' socioeconomic status, we instead focus on the effect of the relationship quality within the family. A high level of closeness and attachment is associated with numerous factors which positively influence the educational success and therefore enable social mobility. However, for low status families and migrants in ethnic homogeneous networks it is debated if this close relationships actually lead to upward mobility. Some scholars argue that close intergenerational relationships in migrant families are the key element for integration and upward mobility. Others suggest that strong family relations promote a mobility trap which holds descendants especially from migrant families socially immobile. Since migrant families tend to have closer family relationships and are disproportionately often in low status positions, it is crucial to understand in which ways the intergenerational transition of status and social mobility opportunities are distributed and determined. Therefore, we focus on this intersectionality by following the question: To what extent does the trajectory of the relationship quality between parents and young adult children influence social mobility in low status migrant families? To analyse the research question, we use data from the Panel Analysis of Intimate Relationships and Family Dynamics (PAIRFAM). PAIRFAM provides longitudinal information on income and education from respondents and their parents, from which we generate our social mobility indicator. It also offers indicators describing family relationships, i.e. variables on closeness and quality of the relationship form which relationship trajectories can be drawn. By focusing migrant family relationship trajectories during the time children become young adults, we shed light on the relevance of family contexts for social upward mobility chances and contribute to research at the intersection of social stratification, family and migration.

TALK 5: Conflict and Youth Life Disruptions in Ethiopia: A Life Course Perspective

Presenter: Yisak Tafere, University of Paris 1 Pantheon-Sorbonne

Unable to politically settle their conflicts, the Ethiopia government and the Tigrayan Peoples' Liberation Front (TPLF) entered into war in early November 2020. Young people were hugely mobilized belligerent political parties into war. The war has affected the lives of all Ethiopians but mainly the young people. Their transition into adult life through education, work, marriage, living agreements and family formation is disrupted. Although multiple hurdles such as poverty, early marriage, workload, migration, illness deter the achievements of aspirations, (Tafere 2015; 2014), the current war seems to emerge as the most challenging life barrier to the development aspirations of young people in Ethiopia. This paper tries to document the participation and impact of the current war in Ethiopia on the life of young people. By taking certain cases, it establishes their war experiences within the life course perspective which embraces the lives of individuals in the context of time and space (Elder, 1974; 1985). It argues that the war has deterred their childhood aspirations by disrupting their transition into adulthood through education, work, family formation, marriage, migration, and exposing them to various abuses. The paper explains the multiple identities of youth as catalysts of, actors in and victims of the ongoing war in the country.

The paper is based on my 16 years of study of cohorts of children in Ethiopia - https://www.younglives.org.uk/people/countryteams/yisaktafere and current study on the impact of the War on their childhood aspirations and disruption of their transition into adulthood.

3A SYMPOSIUM

Social Differences in Child Development: An Interdisciplinary View Using Data of the National Educational Panel Study

Convenors: Manja Attiq and Dave Möwisch, Leibniz Institute for Educational Trajectories

During the first years of life the basis for later educational processes is formed. As children from diverse socioeconomic backgrounds differ in their cognitive, language and socioemotional skills and these differences persist through childhood, it's essential to investigate how such social difference emerge and to identify the underlying mechanism. To focus on these mechanism, longitudinal data on early educational development to school age is needed. Taking this into account the German National Educational Panel Study (NEPS) aims to longitudinally investigate the competence development in different age groups including two starting cohorts — one starting with 7-month-old children (SC1), one starting with 5-year-old children (SC2). The present symposium intends to bring together interdisciplinary research based on NEPS data to discuss questions concerning social differences in child development. The first two presentations investigate the role of parenting behaviour in explaining social differences in early child development. The third presentation includes early cognitive abilities and social background as predictors for school readiness skills. The fourth presentation focuses on the long-term development of social differences in the mathematic competence of children. The fifth presentation examines effects of the COVID-19 pandemic on the socioemotional development considering the socioeconomic background as explaining factor.

TALK 1: Effects of Social Inequalities on Early Vocabulary and Math Skills Via Specific Aspects of Maternal Interaction Behavior

Presenter: Dave Möwisch, Leibniz Institute for Educational Trajectories

Co-authors: Manja Attig, Leibniz Institute for Educational Trajectories; Sabine Weinert, University of Bamberg

Previous studies have documented a significant impact of the process characteristics of the early home learning environment (HLE; e.g. quality of interaction) on child development (Attig & Weinert, 2020; Bornstein et al., 2020, Lehrl et al., 2020). Furthermore, it has been shown that the family's socioeconomic status (SES, e.g., parental education) is associated with HLE process characteristics that are related to early vocabulary (Gudmundson, 2012; Huang et al., 2022) and math skills (Garlindo &

Sonnenschein, 2015). While there is empirical evidence that family SES is associated with child vocabulary (Hoff, 2006; Vasilyeva & Waterfall, 2011) and math skills (Burchinal et al., 2011), there is still a lack of research regarding the mechanisms linking SES and different facets of early child development. In the present study, we investigated specific maternal behaviours, such as her instructional behaviour and the quantity and quality of her stimulating language behaviour, as potentially mediating variables linking SES and 3-year-old children's vocabulary as well as 4-year-old children's math skills. For the analysis, we used data of N = 1127 mothers and their children of the Newborn Cohort of the German National Educational Panel Study. Path analyses showed different associations between various aspects of maternal interaction behaviour and SES. In particular, higher SES mothers showed less instructional behaviour but a higher quantitatively and qualitatively stimulating language behaviour with distinct relations to later vocabulary and math skills. While instructional behaviour was negatively associated with vocabulary and math skills, a higher quantitatively and qualitatively stimulating language behaviour was only positively associated with vocabulary but not with math skills. Thus, a more fine-grained view at specific aspects of maternal interaction behaviour provides new information to explain social disparities in early child development.

TALK 2: What Can Parents Do? The Causal Mediating Role of Parenting in Explaining SES Differences in Children's Language Development

Presenter: Alejandra Rodriguez Sánchez, University of Potsdam

Objective: This study estimates how much of the differences by socioeconomic status (SES) in children's language development are mediated by parenting styles, parenting practices, and parental investments.

Background: There are large differences in children's language development by parental socioeconomic status (SES). According to some studies, SES gaps in language skills among preschoolers could be reduced substantially by intervening in the parenting styles, practices, and parental investments of low-SES parents. However, the extent to which parenting mediates the effects on language skills of growing up in low-SES contexts is still unknown.

Method: This paper uses data from the National Educational Panel Study starting cohort 1, a random sample of children born between 2012 and 2013 in Germany and employs interventional causal mediation analysis to estimate the mediated share of the total effect of SES on children's language that goes through parenting, broadly understood.

Results: Parenting explains around one-third of the total effect of SES on early language skills, but close to nothing of the effect on later language skills.

Conclusion: Although a share of the SES effect operates through parenting, and all parenting dimensions affect children's language skills, interventions in parenting would be limited in their ability to reduce the gap in substantial ways. Alternative pathways, through which inequality in language skills is reproduced, could potentially explain a larger share of this effect.

TALK 3: Cognitive Abilities, Socioeconomic Status, or Both? Comparing their Effects on Pre-Schoolers' Language, Mathematical, and Science Skills

Presenter: Anna Volodina, Institute for Educational Quality Improvement

Co-author: Jessica Willard, Leibniz Institute for Educational Trajectories

Disparities in student achievement are of great interest for both research and practice. Previous research provided evidence on the importance of exogenous factors – such as family socioeconomic status (SES) – for various cognitive and non-cognitive skills (e.g., Sirin, 2005) as well as on later socioeconomic success (e.g., Becker et al., 2021). Other approaches (e.g., the cognitive ability/genetic transmission model; Marks, 2020) emphasize the role of cognitive abilities, arguing that effects of SES on achievement are only weak (e.g., O'Connell, 2019). Although both approaches seem to be supported by the existing data, both SES and cognitive abilities have rarely been investigated together, especially when focusing on achievement of preschool children. Using data from SC 1 of the German NEPS (N = 1,744; 50.57% girls), the present study aimed to investigate effects of cognitive abilities at the age of 3 years and the most common indicators of SES in empirical education research (i.e., education, occupation, and income) on language, mathematical, and science skills in preschool children. Child gender, child age, family structure, background of migration, and home learning environment were controlled for. Results of regression analyses show significant effects of two indicators of SES (i.e., education and occupation) and cognitive abilities on language, mathematical, and science skills, while results of dominance analyses suggest larger effects of cognitive abilities for mathematical and science skills. Thus, results support both SES and the cognitive ability approaches. However, the present study only relied on a nonverbal test of cognitive abilities. It is conceivable that employing a combination of verbal and nonverbal cognitive ability tests could shift results more in favour of the cognitive ability approach (Roth et al., 2015), because mixed tests cover a wide range of skills. Future studies might also consider the role of SES and cognitive abilities for achievement development and for non-cognitive skills.

TALK 4: The Development of Mathematical Competence of German Students Over Seven School Years: Examining the Effects of Social and Ethnic Disparities and the Transition to Secondary School

Presenter: Jana Kähler, Leibniz Institute for Science and Mathematics Education

Co-author: Olaf Köller, Leibniz Institute for Science and Mathematics Education

The transition to secondary school represents a decisive step in students' educational path, which depends not only on competencies but also on their social and ethnic background (Maaz & Nagy, 2009). However, there is a lack of studies that examine the long-term development of social and ethnic inequalities while taking the transition to secondary school into account. Thus, this article examines the development of mathematical competence from 1st grade in primary school to 7th grade in secondary school. We investigated if social and ethnic disparities are already evident at the beginning of primary school and if

these inequalities persist into secondary school. Furthermore, we included the transition to secondary school and examined if the chosen school track affected the development of mathematical competence. We estimated latent growth curve models and effect sizes by using the data of the German National Educational Panel Study, Starting cohort 2 (N = 6,525). Results showed that students already differed in their mathematical competence at the beginning of primary school and that these differences could be traced back on cognitive abilities but also on social and ethnic disparities. Moreover, we found interindividual differences in the growth of mathematical competence over time which uncover social disparities. Students from high-income households showed a stronger competence growth compared to students from low-income households. In addition, effect sizes revealed that students who went to an academic track school showed a stronger competence development in primary and secondary school than their peers from non-academic track schools. In summary, competence differences already emerged at the beginning of primary school due to social and ethnic disparities and persisted into secondary school. Furthermore, the transition to secondary school seems to reinforce the link between social background and competence development, which fosters educational inequalities due to differential developmental environments of different school tracks.

TALK 5: Effects of the COVID-19 Pandemic on the Development of Primary School Students' Socioemotional Development

Presenter: Markus Vogelbacher, Leibniz Institute for Educational Trajectories

Co-author: Christoph Homuth, Leibniz Institute for Educational Trajectories

Recent international research on the socioemotional development of elementary school students paints a bleak picture of rising social and behavioural problems during the COVID-19 pandemic (Mistry, Benner & Kimura, 2022). However, the socioemotional development during the pandemic is rarely compared with empirical evidence on pre-pandemic development. Furthermore, the origin of variance in socioemotional development during the COVID-19 shutdown seem underexposed.

We investigate if pandemic effects show up when comparing socioemotional development in primary school students during the pandemic with the development in children of the same age group that did not experience the pandemic. Additionally, we investigate if structural factors and processual characteristics in the family explain differences in the socioemotional development in the course of the pandemic. We draw on Family Investment (Conger & Donnellan, 2007) and Family Stress Models (Conger et al., 1992) as theoretical backdrop.

Data on children's prosocial behaviour was collected at the end of preschool and the third grade in Starting Cohort 1 (n= 1.883) and Starting Cohort 2 (n= 1.140) of the German National Educational Panel Study (NEPS). While children of the Starting Cohort 1 experienced the first school shutdown in 2020 in grade 2, children of Starting Cohort 2 attended grade 2 in 2013. Data on behavioural problems were drawn from Starting Cohort 1 (n=1.794) collected in preschool (2018), second grade (2020) and fourth grade (2022). We utilize difference-in-differences and value-added regression models to analyse the data.

Preliminary results don't show a deterioration in prosocial behaviour in the Corona-Cohort, neither in a longitudinal perspective nor in comparison with the Pre-Corona-Cohort. Differences in the sociodemographic characteristic of the families and psychological distress of the parents seem to explain a part of the variance in the development of prosocial and problem behaviour during the pandemic.

3B symposium

Conceptual and Methodological Advancements in Modelling Social and Biological Trajectories Across the Lifecourse

Convenors: Katie Taylor, University College London, and Thomas O'Toole, University of Manchester

This symposium seeks to showcase interdisciplinary health research, focussing on social and biological trajectories across the life course. This research uses international cohort studies and various longitudinal statistical techniques to model the biological pathways through which social exposures "get under the skin" to influence socially patterned differences in various life course trajectories.

Trajectory-based modelling can help to bring a life course perspective to social-biological transitions research. It is a useful tool in developing our understanding of how complex social and biological ecologies interact to produce intra- and inter-individual variability in social and biological outcomes over time. All presentations in this symposium are from PhD candidates as part of the UK ESRC-BBSRC Soc-B PhD programme.

The first study explores the influence of adolescent social connections on adiposity trajectories using Add Health. The second study explores the extent to which allostatic load predicts psychosocial job characteristic trajectories in midlife using Understanding Society. The third study investigates the association between genetic variants and resilient functioning trajectories in early life using ALSPAC. The fourth study explores associations between sociodemographic characteristics, loneliness trajectories, and subsequent health using CLoCk. The final study tested whether social isolation in older age was associated with intrinsic capacity trajectories using ELSA.

TALK 1: Do Associations Between Social Connections and Adiposity Differ by Race, Ethnicity and Gender: Longitudinal Findings from The National Longitudinal Study of Adolescent to Adult Health

Presenter: Katie Taylor, University College London

Co-authors: Eleonora lob, Kings College London; Daisy Fancourt, Yvonne Kelly, University College London

In the past three decades, the prevalence of childhood obesity has more than tripled in adolescents. Early life obesity tracks into adulthood and can have a significant impact on psychological and physical health across the life course. Positive social connections, including high levels of social support, larger social networks and good relationship quality have been associated with reduced obesity risk. Likewise, negative social connections including loneliness, social isolation and relationship conflict seem to have the opposite effect. However, within these associations, there are poignant gaps that need addressing including the longitudinal effects of social connections on adiposity, how these relationships manifest in early life, and whether the associations differ by gender and ethnicity.

The current study aims to investigate the relationship of different social connection dimensions (structural, functional, and quality) in adolescence with trajectories of body mass index (BMI) and waist circumference (WC) across adolescence to adulthood. It further aims to explore whether age, gender, and ethnicity modify this relationship.

This longitudinal cohort design uses data from the National Longitudinal Study of Adolescent to Adult Health (Add Health), a nationally representative sample of adolescents through to adulthood. Social connections at Wave I, BMI at Waves 1-5 and WC at Waves 4-5 will be used in the analyses. Mixed effect growth curve modelling will be used to estimate BMI and WC trajectories for different levels of social connection constructs, including structural (social contact, social participation, relationship status, and social network), functional (loneliness, social support), and quality (positive and negative aspects). To explore differences across age, gender and ethnicity interaction effects will be tested alongside stratified models for interpretation.

The sample includes 16,913 participants with ages ranging from 11-21 years at baseline and 52.1% males. Ethnicities included are African American, Asian, Caribbean Black, Hispanic, Native American, and White.

TALK 2: Healthy Work: Psychosocial Job Quality Trajectories and Allostatic Load in the UK Household Longitudinal Study Presenter: Thomas O'Toole, University of Manchester

Co-authors: Kimberly Dienes, Swansea University; Christopher J. Armitage, Martie Van Tongeren, University of Manchester Psychosocial employment characteristics and physiological functioning are often theorised to exist in a feedback loop; low quality employment is predictive of poor health, which in turn filters the workforce into different job trajectories, perpetuating this cycle over the life course. However, while literature has noted reciprocal causality between the workplace and allostatic load (a sub clinical index of cumulative physiological wear and tear), the work trajectories of those with varying levels and typologies of allostatic load has yet to be charted. Further, employment trajectories are often operationalised through the lens of job precarity, however, a focus on change and instability in the labour market forecloses on the role of a range of psychosocial job characteristics that individuals experience while in employment. As such, a closer examination of the work trajectories for individuals with different levels of allostatic load is needed to shed light on not only how the workplace "gets under the skin", but how our situated biologies may shape the social patterning of our working lives.

This analysis aims to model the latent growth of psychosocial job characteristics and explore the extent to which allostatic load factor structures predict these work trajectories. Using data from waves 2, 4, 6, 8, 10 and 12 of Understanding Society (2010-2021) latent growth curves for job satisfaction, job anxiety, job autonomy, job insecurity, perceptions of fair pay and income were calculated. Allostatic load was modelled at baseline (wave 2) in an exploratory factor analysis, using markers from the neuroendocrine, immune, metabolic, cardiovascular and physiological systems. To compare trajectories, multi-group latent growth curve modelling was used to chart the trajectories of psychosocial job characteristics, with allostatic load as a predictor. Results and interpretation will be discussed.

TALK 3: A Genome-Wide Association Study of Longitudinal Resilient Trajectories in The Avon Longitudinal Study of Parents and Children (ALSPAC)

Presenter: Stephanie Cahill, University of Manchester

Co-authors: Reinmar Hager, Nick Shryane, University of Manchester

Adverse childhood experiences (ACEs) have been linked to increased risks of mental health disorders, chronic diseases, and risky behaviours. However, some individuals exhibit resilience to adversity and maintain good mental, physical, and social health. This resilience is an active, dynamic process influenced by intrinsic and extrinsic factors, including genetics, with twin studies suggesting between 31% to 52% heritability. Genome-wide association studies (GWAS) offer a way to estimate associations between millions of genetic variants and diverse phenotypes, yet only two GWAS of resilience have been conducted to date potentially due to lack of definition/operationalisation standards for resilience in large datasets. Longitudinal data analysis, which involves monitoring phenotypes over time, has been shown to enhance the efficacy of GWAS and boost heritability estimates for certain phenotypes. By operationalising resilient functioning as better than expected psychosocial functioning given specific levels of ACEs, we follow patterns of resilient functioning across time and identify group-based trajectories of longitudinal functioning using latent growth mixture modelling. The accuracy of using genetic information to differentiate more precisely defined longitudinal trajectories of resilience to adversity is not well established but could help inform strategies for preventing and mitigating the negative outcomes associated with childhood adversity.

Using data from ALSPAC, we use growth mixture modelling to identify group-based trajectories of resilient functioning from birth to adolescence. Linear mixed models are used to examine associations between genetic variants and different trajectories of resilient functioning across the early life course. Gene-set enrichment analyses are then performed to identify functional pathways that are enriched for variants associated with resilient functioning. Results are discussed with the hope to inform the development of targeted interventions to promote resilience and prevent adverse outcomes.

TALK 4: Loneliness Prevalence and Trajectories, Associated Factors and Subsequent Health in Children and Young People During the COVID-19 Pandemic: A National Matched Cohort Study

Presenter: Verena Schneider, University College London

Co-authors: Tom Norris, Manjula Nugawela, Terence Stephenson, Roz Shafran, Snehal M. Pinto Pereira, Emma Dalrymple, Laila Xu, University College London; Kelsey McOwat, UK Health Security Agency; Dougal Hargreaves, Imperial College London; CLoCk Consortium members

Background: Loneliness is common amongst children and young people (CYP) and an independent risk factor for poor health.

Aims: To i) determine whether subgroups of CYP with different loneliness trajectories (during the second year of the pandemic) exist; ii) examine associations with socio-demographic characteristics and subsequent health; and iii) understand whether associations between loneliness and subsequent health were modified by SARS-CoV-2 infection.

Methods:5851 CYP (N=3,260 SARS-CoV-2 positive and 2,591 SARS-CoV-2 negative) provided data on loneliness (via the validated 3-item version of the UCLA Loneliness Scale for Children) at least twice in a 12-month period post PCR testing (conducted October 2020-March 2021). Latent class growth analyses were used to identify distinct classes of loneliness trajectories. Multinomial logistic regression was used to identify socio-demographic characteristics associated with class membership. Logistic regression models assessed the odds of reporting impairing symptoms 12 months post PCR testing.

Results: Four distinct loneliness trajectories were identified: three mostly stable (low, medium, high) and one low increasing trajectory. Being older, female, living in more deprived areas and testing negative was associated with a higher odds of being in the highest vs lowest loneliness trajectory; e.g., OR for female vs male: 5.6 (95% CI:4.1,7.8); OR for 15-17 vs 11-14 years: 4.5 (95% CI:3.4,6.0). Following higher loneliness trajectories was associated with higher odds of experiencing impairing symptoms at 12-month follow-up (ORadjusted for highest vs lowest loneliness trajectory: 15.9 (95% CI:11.9,21.3)). There was no evidence that this association was modified by PCR test result.

Conclusions:5.3% of CYP were classified into a group experiencing (chronically) high loneliness. Being female, older and from more deprived areas were risk factors of belonging to this group and this group was most likely to experience subsequent impairing health.

TALK 5: Social Isolation as a Predictor of Intrinsic Capacity in Older Adults

Presenter: Charlotte Campbell, University College London

Co-authors: Dorina Cadar, Brighton and Sussex Medical School; Anne McMunn, Paola Zaninotto, University College London Intrinsic capacity (IC) is a relatively new concept for measuring health in older age. Social isolation has been associated with a greater risk of negative health outcomes for older people. However, the relationship between social isolation and IC has not yet been explicitly investigated. This analysis tested whether social isolation was associated with the level and rate of change in IC over time, using the English Longitudinal Study of Ageing (ELSA).

Social isolation and IC were measured at 3 time points covering 8-years of follow-up (N=7,690). Item response theory was used to generate a total IC score at each time point from 14 indicators (described in Campbell et al., 2022). A social isolation score (0-7) was generated from seven indicators: living alone, less than monthly contact with children, family, or friends, not being a member of any organisations, not working, and not volunteering. A latent growth curve model was used to model the trajectory of IC and test whether social isolation significantly predicted the level and rate of change of IC score. Covariates included age, sex, education, wealth, smoking, alcohol consumption, physical activity, health conditions, and self-rated health.

When fully adjusted, social isolation was significantly negatively associated with the intercept of IC score (b=-0.65 (SE 0.09), p<0.001) and was positively associated with the slope (b=0.05 (SE 0.02) p=0.008). Those with higher social isolation scores had lower IC scores but had a slower rate of decline than those with lower social isolation.

Less isolated individuals tended to experience a better level of IC but saw a steeper decline over 8 years than socially isolated individuals. It is unlikely that being less isolated 'causes' a steeper decline in IC but that isolated individuals have "less to lose" and remain at a consistently lower level of IC than non-isolated individuals.

3C INDIVIDUAL PAPERS (WELLBEING IN YOUNG PEOPLE)

TALK 1: Family Socioeconomic Status and Socio-Emotional Wellbeing in Middle Childhood: Insights from Australia

Presenter: Iryna Kolesnikova, The University of Queensland

Co-authors: Jenny Povey, Janeen Baxter, Karen Healy, Maca San Martin Porter, The University of Queensland

Positive social-emotional wellbeing (SEWB) is essential to enable children to respond well to adversity both during childhood and throughout their life course. When children's SEWB is compromised, it can lead to their poor performance in school, inability to make/sustain friendships, and low self-esteem. While a number of factors can compromise children's SEWB, poverty and economic inequality have been found to have long-lasting impacts on their lives. Empirical research suggests that children from low socioeconomic status (SES) families fare poorly compared to their more advantaged peers regarding their SEWB. However, there is a lack of evidence on how SES affects children's SEWB during middle childhood (defined as age from 5 till 12), a period where developmental and contextual transitions converge. To address this gap and improve knowledge about the role of SES in children's SEWB during middle childhood, our study analysed data from 58,100 children (4–13 years old) who participated in the Longitudinal Study of Australian Children (LSAC). SES was measured by a combination of families' income, occupation and educational level, and children's SEWB was measured by the parent reported Strength and Difficulties Questionnaire (SDQ). The results from a panel regression with random effects showed that children from low SES experience significantly lower SEWB compared to their more advantaged peers. The findings also demonstrated that children's SEWB improves with age, perhaps suggesting that increasing exposure to school, teachers, peers and other networks outside families may have a positive impact on SEWB. These results suggest that interventions aimed at improving children's SEWB should focus on improving children's socioeconomic disadvantage in the early stage of middle childhood as these children transiting to formal schooling.

TALK 2: Early Life Air Pollution Exposure, Childhood Cognitive Ability and Subsequent Mortality: A Record-Linkage Life-Course Study from Scotland

Presenter: Gergö Baranyi, The University of Edinburgh

Co-authors: Lee Williamson, Zhiqiang Feng, Chris Dibben, The University of Edinburgh

Background: Living in areas with high air pollution concentrations is associated with all-cause and cause specific mortality. Exposure in sensitive developmental periods might be long-lasting but studies with very long-term follow-up are rare, and direct and indirect associations between early life exposure and life-course mortality are not fully understood.

Methods: Data were drawn from the Scottish Longitudinal Study Birth Cohort of 1936, a representative record-linkage study comprising 5% of the Scottish population born in 1936. Participants had valid age 11 cognitive ability test scores; mortality data between age 11 and 86 were derived from the NHS Central Register. Fine particle (PM2.5) concentrations estimated with the EMEP4UK atmospheric chemistry transport model were linked to participants' residential address in 1939 (age 3). Confounder-adjusted Cox regression estimated associations between PM2.5 and mortality; regression based causal mediation analysis explored mediation through childhood cognitive ability.

Results: The total sample consisted of 2734 individuals with 1608 deaths registered during the 1,833,517 person-months at risk follow-up time. Higher early life PM2.5 exposure increased the risk of all-cause mortality (HR=1.03, 95%CI: 1.01-1.04 per 10µg m-3 increment), associations were stronger for mortality between age 65 and 86. PM2.5 increased the risk of cancer-related mortality (HR=1.05, 95%CI: 1.02-1.08), especially for lung cancer among females (HR=1.11, 95%CI: 1.02-1.21), but not for cardiovascular and respiratory diseases. Higher PM2.5 in early life (≥50µg m-3) was associated with lower childhood cognitive ability, which, in turn, increased the risk of all-cause mortality and mediated 25% of the total associations.

Conclusions: In our life-course study with 75-year of continuous mortality records, we found that exposure to air pollution in a sensitive developmental period was associated with higher mortality in late adulthood, and that childhood cognitive ability partly mediated this relationship. Findings suggest that past air pollution concentrations will likely impact health and longevity for decades to come.

TALK 3: A Preliminary Analysis of Texts on LINE: Implications for the Longitudinal Follow-Up of University Students

Presenter: Jennifer Yang, National Chung Cheng University

Gratitude is a crucial self-regulation skill that has been found to significantly influence subjective well-being, including life satisfaction, positive affect, and negative affect. Given its importance, this study aims to explore how higher education can use digital network communities to promote gratitude and enhance psychological wellness in university students. Using a textsentiment analysis approach, this study analysed 1,031 texts shared by a LINE community between January 1 and February 4, 2023. The texts were segmented into words using CkipTagger, and CopeOpi was used to perform sentiment analysis to generate sentiment scores and identify positive, negative, and neutral sentiments for each text. The count of positive and negative words was calculated, and the sentiment expressed in the conversation was analysed based on the ANTUSD dictionary. The results showed that the total word count was 26,903, and the word count of different words was 4,800. The total numbers of positive and negative words in the text were 8,367 and 698, respectively. The ratio of positive-word count to whole word count was 0.31, and the ratio of positive-word count to negative-word count was 11.99. Based on these findings, the study proposes to longitudinally investigate 150 university students' gratitude and psychological wellness using text-sentiment analysis. Wave 1 will explore how the results of the sentiment analysis (i.e., multiple features of the gratitude stories) correlate with their state of gratitude and psychological wellness. In addition, a cross-lagged panel analysis will be conducted at Time 2 and Time 3 to examine the reciprocal relationships between the text features of the gratitude story expressed on LINE (text features), state gratitude, and psychological wellness. Keywords: cross lagged panel analysis, gratitude, psychological wellness, subjective well-being, textsentiment analysis.

TALK 4: Participation in Arts, Culture and Heritage Activities Across the Early Years in Aotearoa, New Zealand

Presenter: Rebecca Evans, University of Auckland

Co-authors: Kahla Redman, Ministry of Culture and Heritage, New Zealand Government; Kane Meissel, John Fenaughty, University of Auckland

Participation and engagement with arts, culture and heritage activities has been widely linked to health and wellbeing benefits for individuals and society across the lifespan. Children given the space and opportunity to play and express themselves through extracurricular activities are more likely to be active, healthy, and creative. Later in life, creativity and community engagement has an important role to play in driving improved social, cultural and economic outcomes. In New Zealand, there is a lack of research investigating what participation looks like for young New Zealanders. Furthermore, policymakers in New Zealand are interested in gauging the impact of COVID-19 on arts and cultural participation in young people. This sector has traditionally been the first to suffer in times of economic difficulty. This paper will present ongoing research utilising longitudinal data from the Growing Up in New Zealand study to describe children's participation in a variety of extra-curricular activities, including music; sports; arts, crafts and technology; dance and drama; and community groups and clubs. Participation has been captured at six timepoints from two to 12 years of age, using both parental and child self-report. With this information we have explored which cultural, sporting, and creative activities children are participating in across time; patterns of participation for different population subgroups; and whether there are any common enablers or barriers to participation. Ultimately, we aim to use a holistic, people-centred assessment of impacts to better understand outcomes of cultural participation and provide evidence of health and wellbeing benefits including school engagement, social cohesion and cultural identity development, central to the wellbeing and empowerment of communities.

TALK 5: Causal Impact of Physical Activity on Child Health and Development

Presenter: Francis Mitrou, Telethon Kids Institute at The University of Western Australia

Co-authors: Ha Trong Nguyen, Hayley Christian, Huong Thu Le, Stephen R. Zubrick, Telethon Kids Institute at The University of Western Australia; Luke Connelly, The University of Queensland

The relationship between physical activity and child development is well-documented, yet the extant literature provides limited causal insight into the amount of physical activity considered optimal for improving any given health or developmental outcome. This paper exploits exogenous variations in local weather conditions observed across random time use diary dates for the same individuals over time to investigate the causal impact of physical activity on a comprehensive set of health, non-cognitive development, and academic outcomes of children and adolescents. Employing a fixed-effects instrumental variables model to 16-year data from the Longitudinal Study of Australian Children (LSAC) survey, we find physical activity improves most general developmental and behavioural outcomes. Our results also indicate statistically significant and widespread health benefits of being physically active. Identified health benefits include reduced BMI and waist circumference, increased probability of having excellent health, decreased likelihood of having any ongoing condition or using prescribed medicine, and reduced health expenditures. However, we find little evidence suggesting that physical activity fosters improvement in academic development per se. We also find that physical activity has a non-linear impact on most health and non-cognitive developmental outcomes. Based on this evidence, we calculate "optimal" hours that children and adolescents should spend each day physically active to obtain the maximum health and non-cognitive developmental benefit. Our findings have potentially important implications for both study methodologies and health policy. For instance, the results emphasize the importance of addressing potential endogeneity and consideration of the non-linear impact of physical activity on developmental outcomes. Moreover, our newly identified "optimal" hours of daily physical activity (ranging between 3.5 to 6.8 hours, depending on the health/development outcome of interest) indicate that most of children and adolescents are not physically active enough to reap the full potential health and non-cognitive developmental benefits.

3D INDIVIDUAL PAPERS (GENDER IN EDUCATION AND EMPLOYMENT)

TALK 1: Same, Same, But Different? Investigating Students' Academic Self-Concept and Persistence in STEM Higher Education

Presenter: Isabelle Fielder, German Centre for Higher Education Research and Science Studies (DZHW)

Political actors and research literature often treat STEM subjects as a homogeneous group, despite considerable differences in gender composition. Therefore, this contribution examines gender differences in students' academic self-concept across STEM fields with different shares of female students, and how their academic self-concept affects students' degree completion. Drawing on Kanter's (1977) theory of tokenism, it is argued that gender disparities in STEM students' academic self-concept favour male students and systematically relate to the gender composition in the respective subject. Using longitudinal data from the NEPS cohort of first-year students, regression analyses are performed to predict students' academic self-concept and their likelihood of graduating. Students' academic self-concept is operationalized through four items corresponding to two components: First, the competence component, represented by students' study-related talents and skills, second, the affect component, represented by their learning behaviour and task management skills in their studies. Results indicate that compared to female students, male students are more likely to perceive higher-level talents and skills (competence) in all STEM fields, regardless of their academic performance. Gender-specific differences in students' perception of their learning behaviour and task management skills (affect) in favour of male students are only evident in STEM subjects with a high proportion (>50%) of female students. In subjects with a low proportion of women, there are no differences between male and female students' perception of their affective abilities. However, perceiving their affective abilities on a higher level only increases male students' probability to graduate, but not that of female students. In contrast, a higher-level subjective perception of competence has a significant positive effect on the likelihood of graduating for both male and female students.

TALK 2: Maternal Employment and Children's Internalizing and Externalizing Behaviour Problems: The Mediating Role of Paternal Involvement

Presenter: Youngjo Im, Chicago State University

Despite the rich knowledge that the existing maternal employment studies offer, our understanding of the mechanisms through which maternal employment affects child development is still limited. Studies on this topic have largely focused on mother-child dyad. We extend the current literature by considering family dynamics, thus explore the mediating role of paternal involvement in the association between maternal work and child outcome. We use sample (N=711) from the Birth cohort of the Project on Human Development in Chicago Neighbourhoods (PHDCN). Our outcome measures include children's internalizing and externalizing behaviour problems at age 5, respectively. Two dimensions of paternal involvement include: (1) amounts of time spent with a father and (2) frequency of activities with a father. Our analysis uses two weighting adjustment methods: Inverse-Probability-of-Treatment Weighting (IPTW) and Ratio-of-Mediator-Probability Weighting (RMPW). Our results show that as fathers were more involved in child-related activities, it decreased children's internalizing problems (γ 2 = -1.50, se = .52, Wald χ 2 = 8.37, p < .01) and externalizing problems (γ 2 = -1.20, se = .56, Wald χ 2 = 12.70, p < .001). However, the amount of time fathers spent was not associated with children's internalizing problems ($\gamma 2 = -.24$, se = .55, Wald $\chi 2 = .192$, p > .05). In some cases, fathers' increased time exacerbated children's externalizing problems ($\gamma 2 = 1.19$, se = .60, Wald $\chi 2 = 3.89$, p < .05). Our study provides substantial evidence that fathers' increased involvement with child-related activities, as mothers go to work, benefit child development. On the contrary, increased amount of time father and child spend does not necessarily benefit child outcome. This suggests that what fathers do with children is more important than fathers' unstructured time with children. Our findings have important implications for designing more effective policies and promising programs that help strengthen fathers and working families.

TALK 3: The Influence of Supply-Side Factors on Gender-Typical and -Atypical Career Paths: Investigating the Role of Parents, Extracurricular Activities, and Individual Characteristics

Presenter: Julia Zimmermann, University of Leipzig

The fact that women and men tend to work in different occupations and sectors is one of the key characteristics of the gender-segregated labour market. However, gender segregation in the labour market is not only problematic in terms of social inequality, but also considered to be economically inefficient. In addition to creating incentives that break down the gender-stereotyped demand behaviour on the part of companies, it is therefore necessary to take a closer look at the causes of gender differences in career choice behaviour. The aim of this presentation is to contribute to the identification of preconditions and contexts that foster horizontal gender segregation. Using longitudinal data from the German Youth Institute's "Growing up in Germany (AID:A II)" survey, the presentation examines whether family characteristics, extracurricular activities and individual factors such as self-efficacy expectation, gender role orientation, work values and interests can predict the transition into gender typical and -atypical vocational or academic training. The data confirms that the majority of the young women and men follow gender typical career paths. However, women are significantly more likely than young men to aspire to gender-neutral occupations. Furthermore, the results of logistic regression models provide evidence that informal and non-formal learning processes are influential in the choice of gender-typical and -atypical career paths. The results suggest that different policy measures need to be taken for boys and girls in order to reduce gender differences in occupational choices: While girls should be encouraged to develop an interest in technology at an early age, stereotypes about female and male attributions and competencies need to be dismantled in the case of boys.

TALK 4: Is the Access to Activation Programs Still Gendered? An Analysis of German Data from 2007 to 2019

Presenter: Veronika Knize, Institute for Employment Research (IAB)

Welfare states tend to reproduce gendered patterns despite gender mainstreaming and policymakers' effort to institutionalize an adult-worker model (e.g., Hook, 2010; Knize, 2022; Lewis, 2001). As in other welfare states, recipients of welfare benefits in Germany can (or must) participate in "activation" programs to improve their chances of finding employment. Although activation policies have usually been studied from an androcentric perspective (Kowalewska, 2016), some studies have shown that women have a reduced access to activation programs compared to men (Kopf and Zabel, 2017). Descriptive statistics demonstrate that the gender gap in the access to activation programs has been declining over the last years, however. Because women's reduced program access translates into lower chances of (re)training and employment for them, a real decline in the gender program participation gap would be an advancement toward gender equity. This paper investigates how program participation changed from 2007 to 2019 and what drives the change. I shed light on whether the change is due to quantitative changes in welfare recipients (e.g., if fewer mothers collect benefits, since they are less likely to participate in programs) or due to qualitative changes. Are public employment services more gender egalitarian in what they promote, amid the rise of individualistic policies? Are today's parents of young children more gender egalitarian than in the 2000s? I consider the dimensions of policies, public employment services, and family and individual in the analysis. The programs selected imply high social investment: upskilling programs and wage subsidies. I draw an inflow sample from administrative data every year from 2007 to 2017 and apply regression methods on each year to analyse program participation within the two following years. A key distinction is made between parents and non-parents of younger children. Ultimately, this paper studies whether gender is becoming less definitive in the welfare state.

TALK 5: The Retirement Transition of the Self-Employed: Gender Differences Across Europe

Presenter: Kathrin Komp-Leukkunen, LUT University

The retirement transition becomes increasingly important in times of population ageing. Population ageing can shrink the workforce and put financial strain on pension schemes. Researchers worry that the workforce will only remain sufficiently large and that pension schemes will only remain financially viable if individuals retire later. Therefore, policymakers strive to delay retirement. The self-employed serve as a role model in this context. They work longer than employees do, and policymakers try to utilize this fact. They encourage older employees to become self-employed, hoping to thereby extend working lives. However, the self-employed and employees have different retirement transitions. The self-employed are more diverse in their retirement transition, and their transition process is more volatile. Moreover, the end of workforce participation and the start of receiving an old age pension coincide less often among the self-employed. Considering these differences in the transition process, the question arises in which other ways the retirement transition differs between the self-employed and employees. Unfortunately, previous research did not yet examine this question in detail. The present study helps to fill this lacuna. It examines gender differences in the retirement transition of the self-employed. Research on employees revealed marked gender-differences in the transition process. This study explores whether similar gender-differences can also be found among the self-employed. To do this, multichannel sequence analyses, cluster analyses, and regression analyses are carried out with European micro-level data from the Survey of Health, Ageing and Retirement in Europe. Findings show that gender-differences in the retirement transition of the self-employed are smaller than expected. A selection bias in who decides to become self-employed may be the reason. Moreover, findings reveal a North-South gradient in gender-differences, tying in with previous discussions on welfare regimes. Policymakers may use the findings to make more informed decisions on policies aimed at extending working lives.

3E INDIVIDUAL PAPERS (WEALTH)

TALK 1: Old-Age Poverty of Informal Caregivers in Germany: Does Care Make You Poor?

Presenter: Miriam Laschinski, University of Hamburg

In employment centred societies the standard of living in old age depends on the previous labour-market participation. Consequently, women face higher poverty risks in old age because of care-related employment interruptions. Growing care dependencies in an ageing society strengthen those risks and can probably lead to cumulative disadvantages in the retirement phase. According to human capital theory, it is assumed that individuals who have provided care in the past (e.g., childcare) also tend to provide care again later (e.g., elderly care). While the impact of childcare-related interruptions on poverty risks is well investigated, less is known about the impact of elderly care. Therefore, the aim of this paper is to investigate, whether persons with employment interruptions due to elderly care face a higher risk of old age poverty. For answering this question, a panel design with data of the Socio-Economic Panel (SOEP) is used. In doing so, different employment trajectories from 1984 to 2020 in Germany are identified to examine a) specific risks of care-related employment interruptions on the household income in old age and b) time varying aspects of those risks over the life course(s) in consequence of impacts of the demographic change, rising de-standardisation and precarious employment in general as well as increasing female labour-market participation specifically. Thereby, changes between and within individuals are explored, so that it is possible to unveil cumulated dis-/advantages due to (gender specific and time-dependent) care-related employment interruptions over the life course.

TALK 2: Family Life Trajectory Features and Personal Wealth of Women and Men in Older Age

Presenter: Nicole Kapelle, Humboldt University of Berlin

Co-author: Carla Rowold, Nuffield College, University of Oxford

In light of an aging population and associated public pension cuts, private wealth accumulation is increasingly important. Nevertheless, wealth inequality—particularly in older age—is rising. When examining potential drivers of wealth inequalities, research and policy has traditionally focused on the role of employment and social background. Although the family has additionally been recognised as a relevant driver of wealth inequality, previous research has not been able to capture and assess what aspects of family life courses are most relevant. This paper examines (I) which family life course trajectory features covering elements of the order, duration, and timing of events are most important for personal wealth in older age and (II) how these features are related to wealth focusing also on (III) wealth stratification by gender. Using German data and an approach that combines machine learning feature selection algorithms and sequence analyses tools with regression techniques, we extend previous research that either (I) assessed few, but potentially irrelevant summary indicators using solely regression frameworks or (II) examined the relevance of entire life course clusters using sequence analyses and regressions without determining which single features matter within or across clusters. Using a data-mining feature selection algorithm, we identify 22 relevant features with duration-related variables deemed as most important and timing-related variables as most common among the selected features. Next, we will finalise the set of selected features regarding multicollinearity concerns and will use OLS regression to assess how these aspects predict women's and men's wealth in older age. For the regression, we will pay close attention to the potential gender differences in magnitude and direction of associations. Our results will provide vital impulses for policy discussions on how to reduce or halt rising wealth inequalities and provide an environment that enables women and men to establish an economic safety net.

TALK 3: The Central Role of Health Impairments for the Employment Transitions of Basic Income Support Recipients: Can Counselling Make a Difference?

Presenter: Cordula Zabel, Institute for Employment Research (IAB)

Health impairments can greatly affect people's prospective life-course trajectories. This paper looks into the impact of health impairments on transitions into employment for Basic Income Support recipients. Half of non-employed Basic Income Support recipients in Germany report severe health problems. The analyses study the impact of type and severity of health impairments on entries into jobs of different quality, as well as effects of job-centre counselling for employment opportunities. The data used is multi-wave survey data from the Panel Study Labor Market and Social Security (PASS), combined with longitudinal administrative data on job and benefit spells. Competing risk hazard models are estimated for effects of health impairments and job-centre counselling characteristics on entries into insured and uninsured jobs, controlling for selectivity of job-centre counselling frequency and type. Type and severity of health impairments affect job entry rates. General counselling frequency increases job entry rates for active jobseekers without health impairments but not for those with health impairments. In contrast, specialized comprehensive counselling increases job-entry rates especially for people with health impairments. However, comprehensive counselling is offered only to a minority of Basic Income Support recipients. The current benefit system was conceived as a system promoting quick labour market integration via activation measures, which does not well fit the situation of benefit recipients with health impairments. In the context of policy reform, it would be important to more explicitly acknowledge health impairments as a major issue for benefit recipients, and to recognize that the Basic Income Support system in Germany is in fact to a large extent a benefit system for people with health impairments.

TALK 4: The Dynamics of Material Hardship Across the Childhood Years

Presenter: Molly Grant, The University of Auckland

Co-authors: Kate Prickett, Victoria University of Wellington; Susan Morton, The University of Technology Sydney

Material hardship and insufficient access to necessities like adequate food, housing, and healthcare, poses risk to healthy child development. However, experiences of material hardship are not necessarily static across childhood and can vary based on changes in household income, employment status, and other events that affect the financial resources available to families. Children with differing experiences of hardship across childhood may have varied outcomes, emphasising the need to explore the dynamics of these experiences over time. This study utilised data from Growing Up in New Zealand, a longitudinal birth-cohort study of over 5,000 children and their families. Data on material hardship were collected at five time points, between birth and early adolescence, and we used social sequence analysis and cluster analysis to identify distinct subgroups of children with differing patterns of material hardship over time. The findings reveal four subgroups: not in material hardship, some exposure to hardship, increasing hardship, and persistent hardship. We then explored the demographic composition of each trajectory which revealed that factors, such as ethnicity, household tenure, and parental education were significantly associated with these subgroups. The findings from this study highlight the importance of examining the dynamics of material hardship. By doing so, we can gain a deeper understanding of the diversity and changeability of the contexts in which children are growing up in, which can inform policies and interventions aimed at reducing hardship and enhancing children's wellbeing and development.

TALK 5: Monetary Returns to Multiple Qualifications in the Context of the German Labour Market

Presenter: Gunther Dahm, German Centre for Higher Education Research and Science Studies (DZHW)

For decades, a high number of students in Germany have completed vocational education and training (VET) before starting university. According to the German Science and Humanities Council, hybrid qualification profiles which combine theoreticalreflective and practical competencies are increasingly in demand on the labour market. However, only few and relatively old studies investigated the monetary returns to this cumulative educational behaviour. These concluded that higher education graduates with prior VET do not earn higher incomes than graduates without prior training - even though the former acquire more human capital, have a stronger connection to professional practice and should therefore be more productive. Whether these findings are reliable, however, is uncertain due to methodological limitations of earlier studies, e.g., overcontrol bias and the lack of a longitudinal perspective that maps the development of income over the course of a career. Drawing on longitudinal data from several graduate surveys of the German Centre for Higher Education Research and Science Studies, this paper investigates the income of higher education graduates with and without pre-academic VET at three points in their careers – one, five and ten years after graduation. Initial analyses using OLS regression contradict the study results available so far. At least in an early career phase, the combination of VET and higher education seems to represent an added value on the labour market. Further analyses show, however, that it is apparently not the hybrid profile per se (a profitable combination of practical and theoretical competencies), that is rewarded, but rather that vocationally pre-qualified graduates of higher education primarily enjoy income advantages when they are employed in vertically inadequate positions. This suggests that the pre-academic VET "merely" serves as a safety net in the case of under skilled employment. In the next step, these preliminary results will be tested using advanced analytical methods (e.g., matching procedures).

3F INDIVIDUAL PAPERS (SOCIAL INEQUALITIES)

TALK 1: Ethnic Biases in Primary School Teachers' Perceptions of Their Students' Academic Attitudes: Evidence from the British Millennium Cohort Study

Presenter: Valentina Perinetti Casoni, University of Bristol

Co-author: Katherin Barg, University of Bristol

Research has established that supportive teacher-student relationships as opposed to conflictual (coercive, discordant) relationships have a positive impact on students' learning, school achievement, and socioemotional wellbeing at early ages and in adolescence. Amongst factors influencing the quality of teacher-student relationships, it has been found that girls, highachieving, extroverted and engaged students are more likely to have close relationships with their teachers. What has been studied less, at least in the UK context, is whether students' ethnic background is related to the quality of teacher-student relationships, above and beyond the effects of student engagement and previous attainment. In this paper, we use data from the large-scale, longitudinal survey Millennium Cohort Study (MCS) to investigate whether there is a relationship between student ethnic background and teacher-student relationships amongst primary school students at age 10-11 years in England. We capture the quality of teacher-student relationships by measuring the discrepancy between teacher's perceptions and student's own reports of the student's attitudes towards school (e.g., whether they enjoy school, whether they give their best in school). The discrepancies are calculated using residuals: a linear regression model predicts teacher reports with student report as main independent variable and, subsequently, the 'distance' between a teacher report and the regression line (residual) represents the discrepancy. We argue that larger discrepancies or 'biases' reflect misunderstandings and conflict in the teacherstudent relationship. Preliminary analyses suggest that teachers tend to, on average and 'compared' to the students' own reports, under-estimate how often students from families who identify as Pakistani, Black Caribbean, and Black African background try their best at school and enjoy school.

TALK 2: High School Grades, Non-Cognitive Capabilities and Social Inequality in Higher Education Enrolment

Presenter: Michael Gruttner, German Centre for Higher Education Research and Science Studies (DZHW)
Co-authors: Michael Grüttner, Frauke Peter, Sandra Buchholz, German Centre for Higher Education Research and Science
Studies (DZHW)

Sociological research on educational choices after completion of the secondary school career constantly reproduces the fact of social inequality in higher education enrolment. Thereby, the crucial role of high school GPA is regularly demonstrated, both for the educational choice in general and for explaining social inequalities in higher education enrolment. Because of the prominent explanatory power of GPA, other mechanisms that might be related to both academic performance and educational choices are at risk of remaining uncovered. In contrast to sociological research that explains educational decisions through additive primary effects (performance) and secondary effects (expectations, beliefs), studies in economics of education incorporate non-cognitive capabilities that relate to academic achievement to explain educational attainment. The contribution of non-cognitive capabilities to educational choices after high school completion and social inequality in higher education enrolment beyond differences in GPA has so far remained largely unnoticed. We use panel data from the German Centre for Higher Education Research and Science Studies (DZHW) to close this gap by examining the likelihood of entering university after obtaining a higher education entrance qualification. We consider the self-efficacy expectations and impulsivity (urgency, premeditation, perseverance, sensation seeking) as potential relevant noncognitive capabilities (both are related to the concept of Grit). Results show significant correlations between noncognitive capabilities and both GPA and the probability of enrolment. The influence of the latter on enrolment is partially moderated by GPA. Machine learning (LASSO) indicates that interactions between social origin, perseverance and GPA should be considered. GPA and perseverance are of greater importance for enrolment of students from low social origin, with the effect of Perseverance being largest for low social origin plus low GPA. Our study demonstrates the complex role of non-cognitive capabilities in explaining social inequality in higher education enrolment in Germany.

TALK 3: Are Socio-Economic Inequalities in Mental Health Equal Across Countries? Longitudinal Analyses of National Adolescent Cohort Studies

Presenter: Thomas Steare, University College London

Co-authors: Gemma Lewis, Alexandra Pitman, Praveetha Patalay, University College London; Sara Evans-Lacko, London School of Economics; Kelly Rose-Clarke, Kings College London

Background: Socio-economic inequalities are widely observed in adolescents across different health outcomes, including mental health. In the UK, adolescents that report being from a low socio-economic position, typically experience lower levels of wellbeing and higher severity of mental health symptoms. These inequalities are often assumed to be universal across countries, however even in countries of similar wealth and development, the magnitude of socio-economic inequalities in adolescent mental health differ. Comparative longitudinal research has primarily focused on a small number of countries in Europe and North America, and typically neglects regions where the vast majority of the world's adolescents live. Analyses across a broader range of countries may help identify context-specific drivers of socio-economic inequalities in adolescent mental health and highlight the potential heterogeneity in the magnitude of mental health inequalities across different countries. Methods: Data has been drawn from multiple nationally representative cohort studies of adolescents. Ongoing parallel analyses are being conducted to identify the extent that socio-economic inequalities in adolescent mental health vary across a range of different countries, including the UK (Millennium Cohort Study), Ethiopia, India, Vietnam, and Peru (Young Lives). Exposures include both objective (household income) and subjective (perceived financial standing) in early adolescence, with the outcome, psychological distress, measured in mid-adolescence. Results: I will present results from the analyses of each individual cohort, comparing gradients and relative

effect sizes for objective and subjective economic position within and across countries. Initial analyses highlight differences between countries in the magnitude of mental health inequalities according to socio-economic factors. Conclusion: The findings and their implications for both how we understand socioeconomic inequalities in mental health and for evidence generation across a diverse set of contexts will be discussed.

TALK 4: Socioeconomic Inequalities and Age at Menarche: Assessing Early Life Course Environmental Stress in Girls in Germany

Presenter: Lara Bister, University of Groningen

Co-authors: Roberta Rutigliano, University of the Basque Country; Tobias Vogt, University of Groningen

Age at menarche is significantly lower among girls who experience early-life adversities such as socioeconomic inequalities, discrimination, or environmental distress. Accelerated sexual maturation triggered by unfavourable ecological conditions, such as contextual strains, explains this phenomenon. However, research on age at menarche lacks an intersectional perspective, and the effects of double burden on girls of, for example, socioeconomic disadvantage and macro-level economic strain are less understood. Exploiting the setting of post-reunification East and West Germany, where East Germany experienced increased political destabilisation and a significant recession, our study aims to investigate the effect of early life environmental distress on girls' age at menarche across socioeconomic strata. Using data from the German Child Health and Development Survey (KiGGS), we apply accelerated failure time regression modelling to predict age at menarche by environmental and socioeconomic stress exposures for n=4,400 girls born between 1985 and 2005 in East and West Germany. Our results show, first, lower age at menarche for East than West German girls, and second, most considerable differences among girls with lower socioeconomic backgrounds. These findings emphasise the relevance of a double burden of environmental early-life adversities. Furthermore, they request political action to protect young individuals from these stress exposures.

TALK 5: Demographic Disparities in the Risk of Loss of Dual Functionality

Presenter: Shawn Bauldry, Purdue University

Co-authors: Patricia A. Thomas, Madison R. Sauerteig-Rolston, Kenneth F. Ferraro, Purdue University

Background: Recent work has developed a new concept, dual functionality, that represents the combination of physical and cognitive functioning. Both domains are important for independent living and quality of life among older adults. This study analyses gender, race-ethnicity, and education-based disparities in the risk of loss of dual functionality over the later stages of the life course.

Methods: Using data from the Health and Retirement Study and the National Health Interview Study Linked Mortality Files from 2000 to 2014, this study constructs a measure of dual functionality based on the absence of limitations in activities of daily living and dementia. This measure is then used to determine the age older adults first lose dual functionality (or are censored) beginning at age 50 for over 33,000 respondents with multiple waves of observations. Survival models are used to analyse differences in the risk of loss of dual functionality by gender, race-ethnicity, education, and their intersection. Preliminary

Results: Initial analyses reveal substantial disparities in the prevalence of dual functionality by education, gender, and race-ethnicity across age groups. For instance, at ages 50 to 54, we find the prevalence of dual functionality to be: 5 to 10 percentage points lower among non-Hispanic Black older adults than White older adults; 19 to 25 percentage points lower among older adults with less than a high school degree compared to those with a college degree or higher; and 1 percentage point lower for women than men but that grows to a 10 percentage gap at ages 85 and above.

Contributions: Dual functionality represents an important concept in aging and population health that accounts for quality of life and the capacity for independent living. Disparities in the risk of loss of dual functionality highlight demographic groups that may benefit from additional resources, particularly related to caregiving needs.

4A SYMPOSIUM

Comparing Cohorts and Mixing Methods with the TREE Panel Study: Latest Developments, Recent Results, and Future Potential

Convenor: Andrés Gomensoro, University of Bern

The symposium introduces the latest developments, recent results and future potential of the Swiss TREE panel study (Transitions from Education to Employment). Among other things, the progress of TREE's longitudinal observation of presently two school leavers' cohorts (2000 and 2016) allows for the first inter-cohort comparisons. Moreover, a qualitative mixed-methods study called PICE (Parental Investment in Children's Education) has been conducted between 2019 and 2022 with a subsample of the second TREE cohort. PICE deals with 'resilient' educational pathways of disadvantaged young people and how they are accompanied and supported by their parents on their way to work and adult life.

The first paper presents results comparing the two TREE cohorts' transitions from lower secondary to upper secondary education. It then introduces the TREE data dissemination strategy and the potential for future research/analysis. The second contribution focuses on the effects of lower secondary schools as differential developmental environments on the transition to post-compulsory education. By means of a mixed-methods approach, the third contribution examines the immigrant family bargain and its effect on educational success of some descendants of immigrants in Switzerland.

TALK 1: Latest Developments, Recent Results and Future Potential of the TREE Study

Presenter: Thomas Meyer, University of Bern

This presentation provides an overview on recent progress and developments of the TREE multi-cohort panel survey, some salient recent results and an outlook on what the future holds in store in terms of data availability and analysis potential. The first TREE cohort (TREE1) was launched in 2000 and draws on a large national (compulsory) school leavers' sample (N>6.000) tested and surveyed on the occasion of Switzerland's then first-time participation in PISA (Gomensoro & Meyer, 2017). Since then, the sample has been followed up by means of 10 survey panels, the most recent one conducted in 2019/20. Further survey panels are planned at five-years intervals. The observation span covers a range from early adolescence (age 15-16) up to early middle-age (40 years old).

The second TREE cohort (TREE2) was launched in 2016 and draws on an initial school leavers' sample of over 8.000 students having been tested and surveyed in the context of a national mathematics assessment programme. To date, the sample has been followed up by means of six survey panels at yearly intervals, with further panels planned at looser intervals in the years to come (Hupka-Brunner et al., 2023).

The contribution presents first analyses comparing post-compulsory pathways of cohorts 1 and 2 (Gomensoro & Meyer, 2021). The findings primarily show how the strongly stratified structures of the Swiss education system persistently determine socially iniquitous educational outcomes, despite major changes of the system's macro-context that have occurred between the launch of the two cohorts (2000-2016). The presentation concludes with an outlook on TREE's data release strategy and the future research/analysis potential this strategy opens up.

TALK 2: Schools as Differential Developmental Environments: Tracking and School Composition Affect Students' Pathways into Adulthood

Presenter: Katja Scharenberg, Ludwig Maximilian University of Munich

Co-author: Wolfram Rollett, University of Education Freiburg

Many OECD countries apply tracking in secondary education, but they largely differ in terms of when students are assigned to different school tracks (Köller et al., 2019; Woessmann, 2009). Cross-country comparisons show that early tracking increases inequality in educational opportunities (e.g., Hanushek & Woessmann, 2005). Track-specific developments of students' achievement can be explained by the school learning environment, i.e., by different institutional learning opportunities, curricular offerings and didactics (institutional effects). Such effects are also related to differences in the student body composition, e.g., regarding academic achievement, SES and ethnic origin (Baumert et al., 2006).

We examined whether tracking and differences in (lower secondary) school composition affect students' transition to post-compulsory education. Analyses were based on the two TREE school-leavers' cohorts launched in 2000 and 2016. Multilevel logistic regression analyses (HLM 8; Raudenbush et al., 2019) applied a stepwise model specification approach (Hox et al., 2018). Results show that transition rates systematically varied between schools (TREE1: ICC=0.217, TREE2: ICC=0.128, each p<.001), but indicate a shift towards fairer chances for students at this transition. Yet, students' affiliation to tracks with extended requirements also affected their transition probability beyond the effects of individual characteristics (TREE1: OR=1.67, TREE2: OR=2.91, each p<.001). Significant variance proportions were linked to school composition indicators: We found disadvantages for schools with a higher percentage of students mainly speaking the teaching language at home (TREE1: OR=0.12, p=.001) and advantages for schools with a higher average SES (TREE1: OR=3.21; p<.001) and higher average achievement (TREE2: OR=1.33; p=.042). Our analyses extend the empirical knowledge base on differential environments for learning and development by examining its effects on transition to post-compulsory education, a key indicator of students' educational biography, as outcome variable. Our findings underscore the importance of differential learning environments for students' developmental trajectories as well as the need for measures to counterbalance school-related risk factors.

TALK 3: Realizing the Immigrant Bargain? Migration as an Intergenerational Social Mobility Project

Presenter: Andrés Gomensoro, University of Bern

Co-authors: Marieke Heers, FORS - University of Lausanne; Chantal Kamm, Pädagogische Hochschule Bern; Sandra Hupka-Brunner, University of Bern

The immigrant bargain is often put forward as an explanation why children of migrants outperform their native peers in terms of educational success. The immigrant bargain describes that, compared with their previous socio-economic position in the country of origin, migrants often experience downward social mobility and find themselves in lower social positions. They accept this as they believe that their children will catch up and potentially exceed their parents' pre-migration status. Social mobility then becomes an intergenerational family project. However, little is known on the strategies that families activate to realize the immigrant bargain and the role that parental aspirations and pressure play in this process. This study sheds light thereon. It focuses on Switzerland and on families with a migration history that are disadvantaged in terms of educational and socio-economic status. These families are compared to native families. Drawing on a mixed-methods framework, we use data from TREE's 2nd cohort (TREE2) as well as qualitative data collected in the context of PICE (Parental Investment in Children's Education), an extension study of TREE2. As parents and children are interviewed, the analysis takes an intergenerational perspective. We find that social mobility is an intergenerational project that is pursued jointly by the young adults and their parents. In order to compensate for the "non-achievement" of their own aspirations, migrant parents develop higher educational aspirations for their children than natives. Parental pressure is an important strategy in this process. Overall, we find positive attitudes towards school rooted in the immigrant bargain.

TALK 4: Diverging Educational Aspirations Among Compulsory School-Leavers in Switzerland

Presenter: Tobias Ackermann, University of Bern

Co-author: Robin Benz, University of Bern

Educational aspirations play an important role in shaping students' educational trajectories and destinations. Despite the well-corroborated finding that educational aspirations are predictive of students' educational attainment, temporal change of educational aspirations have thus far known little empirical investigation. The present study investigates how Swiss students form and adjust their educational aspirations in the first three years upon leaving compulsory school. With reference to theories of rational action and the Wisconsin Model of status attainment, this study argues that the transition into post-compulsory education constitutes a pivotal moment for students to revise their educational goals and that this process varies depending on the pursued educational pathway.

Drawing on longitudinal data from the Transitions from Education to Employment study (TREE2), this paper first examines which factors are related to students' educational aspirations using random-effects ordered logistic models. In a second step, multinomial logistic regressions inform about the way students adjust their aspirations over time and the role of track placement. Over the observed period from 2016 to 2019, more than half of the students under scrutiny have adjusted their initial educational aspirations. Regression results provide evidence that students in general education and those from privileged socio-economic backgrounds set the most ambitious educational goals for themselves. At the same time, there is an overall shift in students' aspirations towards more demanding educational degrees. While students in general education tend to stick to their aspirations, their counterparts in vocational programmes exhibit less stable aspirations.

By demonstrating that educational aspirations are subject to temporal dynamics markedly shaped by track placement, this study contributes to a better understanding of educational trajectories.

4B SYMPOSIUM

The Promise (and Potential Pitfalls) of Genetic Research in the British Birth Cohort Studies

Convenor: Liam Wright, University College London

The increasing availability of genetic data has generated new opportunities for answering age-old questions in the health and social sciences, spawning new literatures (e.g., "socio-genomics" and genetic epidemiology). This includes research on intergenerational transmission of inequality, on change and stability over the life course, on family dynamics and the "nature of nurture", and on the intersection of genes and environments. This symposium will focus, in particular, on the opportunities afforded by the genetic data available from the world-class British birth cohort studies, which span 1946 to the present day. The first presentation will provide an accessible overview of genetic research methods, and the second will introduce the British Birth cohort study data, specifically, including discussion of procedures for data access. Two papers will then be presented showing examples of research possible with this data: the first, integrating genetics with cross-cohort and life course perspectives; the second using genetic data from parents to look at "indirect" genetic effects on children via parent behaviour. The session will conclude with a question-and-answer session with the audience.

TALK 1: An Introduction to Genetics Research for Social Scientists

Presenter: Tim Morris, University College London

This presentation will provide a rapid introduction to genomics and methods for handling genomic data that are available and of potential value to social scientists. Individual genes can provide useful information about our traits and behaviour, but effects are typically very small and only distinguishable in samples with hundreds of thousands of participants. These effects can however be aggregated into "polygenic scores": a proxy of known genetic predisposition towards a given trait. These offer social scientists' new insights into the formation of outcomes that run orthogonal to the social information we typically have to hand and allow a more holistic understanding of health and social processes. Another approach that will be discussed exploits the random inheritance of parental genes at conception, which allows opportunities for causal inference using genes as instrumental variables. The presentation will also discuss methodological constraints to genetic studies. Particular focus here will be on the impact that social and demographic processes such as assortative mating, family environments, and ancestral migration patterns can have on genetic data-based studies. While these can themselves be examined to elucidate new information about family and social behaviour, they often represent a problem for published genetic studies where they can bias estimates, confuse interpretations, and lead to incorrect conclusions.

TALK 2: Introduction to Genetics Data in the British Birth Cohort Studies

Presenter: Gemma Shireby, University College London

This presentation will provide an overview of the genetics data available from four British birth cohort studies, born in 1946 (the MRC National Survey of Health and Development), 1958 (the National Child Development Study), 1970 (the 1970 British Cohort Study) and 2001/02 (the Millennium Cohort Study), respectively. This data includes the recent construction of an imputed and quality controlled genotypic dataset of trios of Millennium Cohort Study cohort members and their parents. These data have several attractions, including integrating genetics into cross-cohort and life course research and facilitating the detection of parent-of-origin effects. This presentation will discuss the data available, data access procedures, and ongoing work to generate polygenic risk scores for a range of traits in the cohorts that researchers will be able to use in their research.

TALK 3: Changing Polygenic Penetrance on Childhood and Adolescent Body Mass Index in Great Britain Between 1946 - 2018: A Cross-Cohort Analysis of Two British Birth Cohort Studies

Presenter: David Bann, University College London

While the precipitous increase in obesity over the past five decades demonstrates an important role of the environment in determining body weight, several gene-environment interaction studies have found that genotypic penetrance – defined as the association between genotype and body mass index (BMI) - has increased alongside the obesity epidemic. However, these studies are limited by an exclusive use of data from adults and a focus on changes in penetrance on mean BMI, but not on its distribution. In this study, we conducted a cross-cohort analysis to examine how the polygenic predictions of childhoodadolescent BMI differ in two British birth cohorts born before (the MRC National Survey of Health and Development [1946c]) and amidst (the Millennium Cohort Study [2001c]) the obesity epidemic. BMI was measured at multiple timepoints from 4-15 years and 3-17 years, respectively. We converted BMI (kg/m2) to z-scores using growth references charts and used a polygenic indices (PGI) from a GWAS of childhood BMI to investigate associations with BMI z-scores at each age. We used linear regression to estimate associations with mean BMI, GAMLSS to estimate associations with the variance of BMI, and logistic regression to estimate associations with obesity, specifically. Childhood and adolescent BMI and obesity rates were substantially greater in the 2001c than the 1946c. The PGI for childhood BMI was more strongly related to BMI in the 2001c than the 1946c up to age 7y associations from age 11y onwards were more similar across the two cohorts. There was little consistent evidence that the childhood PGI was associated with the variance (SD) of BMI. The child PGI was associated with obesity more strongly (on the relative scale) in the 2001c than the 1946c up to age 7, but this pattern was reversed at older ages.

TALK 4: Intergenerational Effects of Parental Cognitive Ability on Offspring Health: An Analysis of MCS Trio Data

Presenter: Liam Wright, University College London

A large literature shows that individuals with higher cognitive ability live longer, have better health, and exhibit more salutary health behaviours. However, as parents and children's cognitive abilities are correlated, part of this association could be due to an effect of parents' cognitive ability on their offspring's health and behaviour. Recent Genome Wide Association Studies (GWAS) have identified many genetic variants associated with cognitive ability, and parent's genetic variants may have indirect effects on offspring health via influencing parental cognitive ability. In this study, we explore indirect parental genetic effects using data from MCS mother-father-offspring trios. Specifically, we exploit the fact that half of a parent's genome is not inherited by their offspring to examine the association that a parental (non-transmitted) polygenic score for higher cognitive ability has with several measures of offspring health and health behaviours, including body mass index.

4C **SYMPOSIUM**

A Lifecourse Approach to Early Life Adversities: Investigating Timing, Duration, and Intergenerational Effects

Convenor: Rebecca Lacey, University College London

This symposium consists of three presentations which take a Lifecourse approach to investigating the effects of early life adversities on life course health and transmission across generations. The paper by Herbert uses the Avon Longitudinal Study of Parents and Children (ALSPAC), a birth cohort from South-West England to model associations between parental intimate partner violence and abuse and young people's own IPVA experiences in early adulthood. Lacey and Farooq both apply a structured Lifecourse modelling approach to test specific life course hypotheses involving timing and duration of adversity exposure. Lacey looks at the importance of timing and duration of experiences of maternal depression across early life (prenatal period adolescence) for early adulthood depressive symptoms in the ALSPAC cohort, testing the life course hypotheses of sensitive periods, accumulation, and instability. Faroog tests accumulation and critical period life course hypotheses for a broad range of early life adversities and their effects on self-harm and depression in adolescence using ALSPAC, the Millennium Cohort Study, and the Environmental Risk (E-Risk) Longitudinal Twin Study. By combining a range of different modelling approaches and datasets, this symposium provides rich empirical evidence on what a life course approach can offer to the investigation of the timing and duration of early life adversities.

TALK 1: Intimate Partner Violence: Should We Target Families to Break the Cycle of Intergenerational Transmission, and What is the Role of Wider Trauma?

Presenter: Annie Herbert, University of Bristol

Co-authors: Jon Heron, Abigail Fraser, Laura D. Howe, Gene Feder, Maria Barnes, Eszter Szilassy, University of Bristol; Christine Barter, University of Central Lancashire

Background: Public health interventions that target families suffering parental intimate partner violence and abuse (IPVA) commonly consider the hypothesis of 'intergenerational transmission' - though comprehensive general population studies are rare. IPVA often co-occurs with other traumatic experiences, however its role in intergenerational transmission is not well understood.

Methods: Using data from 3,233 families from a UK general population birth cohort, we estimated IPVA risks among young women and men at age 18-21, according to their parents' IPVA status when they were age 0-18 (overall and by IPVA subtypes). We calculated Population Attributable Fractions (PAFs) of IPVA in young adulthood, according to parental IPVA status (both 'any' and in combination with other Adverse Childhood Experiences [ACEs].

Results: There were weak positive associations between parental IPVA and IPVA victimisation and perpetration among young women and men (relative risks [RRs] ranged from 1.06 to 1.54, with wide confidence intervals [CIs]). The strongest association was between physical parental IPVA and IPVA perpetration among males (RR: 1.54, 95% CI: 1.09 to 2.20). Estimated associations

were similar after adjustment for socio-economic factors at birth, and largely null after adjustment for co-occurring ACEs). Parental IPVA accounted for up to 13% of IPVA among young adults; these PAFs were mostly driven by high risks in the quarter of children in families of parental IPVA who had also experienced maltreatment, or at least 3 other ACEs, respectively.

Conclusion: Our data suggest a weak positive association between certain types of parental IPVA and IPVA victimisation among young women, and IPVA perpetration among young men. These increased risks are still likely to contribute towards large numbers of young adult IPVA cases given high prevalence of parental IPVA. Services supporting domestic violence cases in families should consider wider trauma, signalling the majority of intergenerationally transmitted risk.

TALK 2: Testing Lifecourse Theories Characterising Associations Between Maternal Depression and Offspring Depression in Emerging Adulthood

Presenter: Rebecca Lacey, University College London

Co-authors: Dawid Gondek, Amanda Sacker, University College London; Brooke J. Smith, Erin C. Dunn, Massachusetts General Hospital; Andrew D. A. C. Smith, University of the West of England

Background: Maternal depression is a major determinant of offspring mental health. Little is understood about how the duration and timing of maternal depression shapes youth risk for depressive symptoms, which if understood could inform when best to intervene. This study aimed to determine how the timing and duration of maternal depression was related to offspring depression in emerging adulthood, and if these associations varied by sex.

Methods: We analysed data from the Avon Longitudinal Study of Parents and Children (a prenatal cohort in the Avon area of England, 1991–2003), n = 3,301. We applied the structured life course modelling approach to maternal depression (assessed at 13 points from prenatal period to adolescence) and emerging adult depressive symptoms (age 21). Lifecourse models assessed were accumulation (sum of timepoints when maternal depression was reported), sensitive periods (each period assessed as one during which maternal depression has a stronger effect) and instability (frequent fluctuations in maternal depression).

Results: Female adolescents (n = 2,132) had higher SMFQ scores (mean = 6.15, SD = 5.90) than males (n = 1,169, mean = 4.87, SD = 4.82). Maternal depression was most common in the infancy period (21.2% males; 21.4% females). For males, accumulation was the most appropriate life course model; for each additional period of maternal depression, depressive symptoms in emerging adulthood increased by 0.11 (95% CI: 0.07, 0.15, one-sided p value \leq .001). For females, exposure to maternal depression was associated with increasing depressive symptoms in emerging adulthood, with the largest effect in mid-childhood (increase of 0.27 units, 95% CI 0.03–0.50, p = .015 for difference between mid-childhood and other time-periods) and a smaller, equal effect at all other time-periods (increase of 0.07 units per time-period, 95% CI: 0.03–0.12, p = .002).

Conclusions: This study highlights the importance of ongoing maternal depression for the development of depression in offspring through to emerging adulthood. Because long-term exposure to maternal depression was particularly important, early interventions are warranted.

TALK 3: The Relationship Between Type, Timing and Duration of Exposure to Adverse Childhood Experiences and Adolescent Self-Harm and Depression: Findings from a Study of Three UK Prospective Population-Based Cohorts

Presenter: Bushra Farooq, University of Bristol

Co-authors: Abigail Russell, University of Exeter; Laura Howe, Annie Herbert, University of Bristol Medical School; Andrew Smith, University of the West of England; Helen Fisher, Louise Arseneault, Andrea Danese, King's College London; Jessie Baldwin, University College London; Becky Mars, University of Bristol

Adverse childhood experiences such as abuse, neglect, and household dysfunction are associated with multiple poor outcomes across the life course. They have been linked to increased risk of self-harm and depression separately, yet there has been little focus on co-occurring self-harm and depression - despite their high comorbidity and increased risk for premature mortality. There is also limited research on both the impact of developmental timing of occurrence and the duration of exposure to childhood adversities on these outcomes in adolescence. This study investigated the relationship between ten different types of adverse childhood experiences and adolescent self-harm and depression, considering the developmental timing and duration of exposure. Data were from three UK birth cohorts: the Avon Longitudinal Study of Parents and Children (ALSPAC), the Millennium Cohort Study (MCS), and the Environmental Risk (E-Risk) Longitudinal Twin Study. Multinomial regression models estimated relative risk ratios for the association between each type of adverse childhood experience and self-harm and depression. A Structured Life Course Modelling Approach was used to examine whether the accumulation of risk (duration of exposure), or a critical period (timing of exposure) hypothesis explained the most variability in self-harm and depression in adolescence. Using data from over 22,000 adolescents across the cohorts, we found increased risks for co-occurring self-harm and depression for the majority of adversities examined. Two life course hypotheses provided the best explanation for the association between different types of adverse childhood experiences and self-harm and depression. A combination of cumulative exposure to different types of adversities from early life through to early adolescence, and a critical middle childhood period, explained the most variability in self-harm and depression. Understanding the relationship between developmental timing, and duration of exposure and self-harm and depression is important for identifying optimum times at key stages of the life course for intervention or prevention.

TALK 4: Social Environment and Cardiovascular Health in Adolescence: Results from the BCS70 Cohort

Presenter: Lola Neufcourt, Inserm - Université Toulouse III Paul Sabatier

Co-author: Michelle Kelly-Irving, Raphaële Castagne, Inserm - Université Toulouse III Paul Sabatier

Evidence has shown an association between disadvantaged early-life socioeconomic position (SEP) and impaired cardiovascular health in adulthood. However, little is known about intermediate periods of life such as adolescence. We used data from the British Birth Cohort Study (BCS70) to investigate the association between socioeconomic position in childhood and adolescence and cardiovascular health at 16 years old taking a lifecourse approach. Specifically, we explored three theoretical models: critical period (during childhood), cumulative parental SEP and social mobility (from childhood to adolescence). We assessed parental SEP using parental education (leaving age before 15yo/after 16yo), occupation (manual/non-manual) and income (low/high), and adolescent SEP using type of school attended (comprehensive/grammar) and intention to continue school after 16 yo (no/yes). We used measures of systolic, diastolic blood pressure and heart rate at 16yo as indicators of cardiovascular health. Linear regressions conducted among 1093 adolescents suggest that participants whose parents had a manual occupation had a higher risk of elevated heart rate at 16yo compared to cumulative parental disadvantaged SEP was associated with higher risk of elevated heart rate at 16yo compared to cumulative parental advantaged SEP (β =1.8 [-0.12; 3.6]). In terms of social mobility, adolescents with stable low SEP as well as upward or downward mobility had a higher risk of elevated heart rate compared to adolescents with stable high SEP. No association was observed between the social environment and blood pressure. Our results suggest that a social gradient in heart rate may start during adolescence in the 1970 British Birth Cohort, which may affect cardiovascular health across the lifecourse.

4D

INDIVIDUAL PAPERS (EDUCATIONAL OUTCOMES)

TALK 1: How Did Bologna Reforms Affect Returns to Higher Education? New Comparative Evidence Using LIS Data

Presenter: Ulrike Schwabe, German Centre for Higher Education Research and Science Studies (DZHW)
Co-authors: Petra Sauer, Luxembourg Institute of Socio-Economic Research; Ulrike Schwabe, German Centre for Higher Education Research and Science Studies (DZHW)

Worldwide, tertiary education has been expanding in recent decades. In Europe, this expansion has been substantially accompanied by the Bologna process, a political reform aiming to create a European Higher Education Area. In some countries, these reforms resulted in changing from traditional one-cycle degrees to two-cycle degrees. Against this background, we investigate how changing the degree structure has affected the higher education wage premium on average, and whether this premium varies across different degrees from higher education that exist after the implementation. We decompose the overall impact of degree-structure changes on the higher education wage premium into two effects—an expansion and a differentiation effect. Although some single-country studies are available, it is still an open empirical question if country differences exist. By providing such comparative evidence, we contribute to existing empirical knowledge. We use data from the Luxembourg Income Study (LIS) for 12 European countries that changed their degree structure. For each country, we pool all individual-level datasets available between 1990 and 2020 and create a cohort structure. To discriminate between the expansion and the differentiation effect on hourly wages, we adopt a sequential control approach. Beyond that, we provide evidence on how the 'new' and 'old' degrees pay off on the labour market by estimating the returns to one-cycle, BA and MA degrees for the two first two 5-year birth cohorts that entered the two-cycle structure. As expected, results for Germany show an average wage premium for higher education graduates compared to non-tertiary graduates. However, the premium is substantially lower for cohorts entering higher education in the post-Bologna period. This reduction is not affected by higher education expansion. But the differentiation effect is driven by traditional one-cycle degrees. Due to substantial differences in higher education systems and implementing Bologna reforms, we expect differing results across countries.

TALK 2: Investigating Positive, Long-Term Educational Outcomes for Aboriginal and Torres Strait Islander Students

Presenter: Melissa Johnstone, The University of Queensland

Co-authors: Ning Xiang, Wojtek Tomaszewski, Katelyn Barney, Tracey Bunda, The University of Queensland

This project aims to identify school practices that can improve long-term educational outcomes for Aboriginal and Torres Strait Islander students. Improving the educational outcomes Aboriginal and Strait Islander students is a priority for federal and state governments in Australia, particularly for students in rural, regional and remote (RRR) areas who tend to demonstrate poorer educational outcomes than their metropolitan peers (DoE, 2017, 2019, 2022). Using data from an ongoing, national longitudinal study of Aboriginal and Torres Strait Islander children and their families from different locations across Australia (The Longitudinal Study of Aboriginal and Torres Strait Islander Children), this project adheres to best practice by adopting a strengths-based quantitative analytical approach (Craven et al., 2016; Thurber et al. 2020) to investigate school practices associated with positive student outcomes. In doing so, this project provides robust evidence into school-level initiatives that can improve outcomes for students and inform policy and practice. Analyses of data from the K cohort (707 children aged 6 months to 5 years in Wave 1) show the importance of Aboriginal and Torres Strait Islander students feeling culturally safe, liking school and having positive relations with teachers within schools for academic self-efficacy and positive academic self-perception. Further, feeling culturally safe is significantly associated with plans to complete Year 12, and liking school is significantly associated with plans to attend university. We also find evidence that school practices have potential to reduce educational disparities between RRR students and their metropolitan peers. Specifically, while students in RRR areas demonstrate poorer educational outcomes than their metropolitan peers, our mediation analyses show this disparity is explained out by socio-demographic factors, and school factors. This suggests that for Aboriginal and Torres Strait Islander students in RRR areas, there are school practices that can be implemented to improve educational outcomes and support students to thrive.

TALK 3: Gaps, Detours and Delays: Biographical Diversity in German Higher Education

Presenter: Nicole Tieben, Leibniz University Hannover Co-author: Matthias Pohlig, Leibniz University Hannover

Access to higher education has changed considerably over the past decades in Germany. Transition patterns and pathways leading into higher education have become more complex and diverse. For instance, instead of directly connecting upper secondary and tertiary education, prospective students may reach higher education after detouring through a variety of activities, like vocational training, temporary employment, internships, military or voluntary services or gap years. Yet, we know little about pathways taken before entering higher education, about the duration of intermediate episodes or the timing and order of transitions. It also remained unclear who is choosing which route into higher education. Our contribution aims at closing this gap. We address three main research questions: 1. How do students use the time between the last year of lower secondary education and first transition to higher education? 2. Which differences in type and duration of delays occur between men and women? 3. Which differences in type and duration of the delays occur between students from different socioeconomic backgrounds? We use data from the National Educational Panel Study (NEPS), starting cohort 5; the sample consists of first-year students who entered higher education for the first time in 2010/11. Sequence- and cluster analysis inform us about the pathways into higher education from the last year of lower secondary education (at age 15) until the first transition to higher education. Thus, we are able to capture the diversity and complexity of pathways into higher education in their entirety, and pinpoint which activities delay higher education. We distinguish "productive" and "unproductive" activities; the former comprise periods of further formal qualification or labour market participation, whereas the latter comprise activities that do not take place in employment, education or training (NEET). We identify six clusters and show that students from lower socio-economic backgrounds need more "time-to-transition", but that they spend more time in "productive" activities in absolute (#months) and relative (% of total duration) terms than students from higher socioeconomic backgrounds. For gender, we show that men have a longer "time-to-transition" but there is no absolute gender-difference in the duration of "unproductive" activities whereas relative to the total duration, women remain in "unproductive" activities for longer.

TALK 4: Does the Impact of Pupil Absences on Achievement Depend on Their Timing? A Cross-Country Comparative Study of England and Wales

Presenter: Markus Klein, University of Strathclyde

Co-authors: Jascha Dräger, Edward Sosu, University of Strathclyde

Numerous studies have demonstrated that school absences are detrimental to students' academic achievement. However, the adverse effect of student absences may vary depending on the timing of exposure. The critical period hypothesis suggests that abilities children acquire throughout the early years are a foundation for future learning. Consequently, if children do not attend school during these formative years, they may be less likely to achieve in the future. On the other hand, theories of a recency effect suggest that attendance during later years is more developmentally significant due to more recent exposure to the examined content. This is because schooling missed during these later years is much more closely related to the benchmarks children are expected to know and are being evaluated on. In addition, later absences may be more frequently caused by unauthorised reasons, reasons that are known to have a more detrimental impact on achievement. Our study contributes to the absenteeism literature by examining the extent to which (a) the timing of absenteeism throughout children's educational career influences their academic achievement, (b) timing of absence effects vary across unauthorised vs authorised reasons for absences, (c) and timing of absence effects vary across the education context of England and Wales. To answer our research questions, we use unique data from the Millennium Cohort Study and linked school administrative data for England and Wales providing detailed information on yearly absences in compulsory schooling (year 1 to year 11) and achievement information at KS1, KS2, and KS4 stages as well as a rich set of risk factors for absenteeism from the survey data. Preliminary results for England indicate that absences have significant negative effects across all key stages. However, absences are most detrimental to academic performance in key stage 3 (year 7/9).

4E INDIVIDUAL PAPERS (EMPLOYMENT AND HEALTH)

TALK 1: Employment Trajectories and Cancer Onset at Older Age in Women: A European Cohort Study

Presenter: Rose van der Linden, University of Fribourg

Co-authors: Stéphane Cullati, Arnaud Chiolero, University of Fribourg; Stefan Sieber, University of Lausanne; Rainer Gabriel, Zurich University of Applied Sciences; Matthias Studer, University of Geneva

Background: Employment trajectories are associated with differences in cancer onset in later life. We assessed how employment trajectories, constructed through sequence analysis, are associated with self-reported cancer in later life among women.

Methods: Data for 7,030 women ≥65 years old without self-reported diagnosis of cancer at baseline, from the Survey of Health, Ageing, and Retirement in Europe (SHARE) were analysed. Employment trajectories from 16 to 65 years old were collected using life calendar and constructed using sequence analysis. Cancer follow-up was conducted for a maximum of 16 years (range 65 to 99 years). Cox regression assessed the associations of employment trajectories with >65 years self-reported cancer onset (all types, breast, cervix, colorectal, lung, and skin).

Results: We identified eight employment trajectories: mainly fulltime; mainly domestic and family work; mainly fulltime to domestic and family work; mainly self-employed; various to part-time; domestic and family work to fulltime; mainly unemployed; other/missing. In total, 1,112 women reported a cancer diagnosis after 65 years. Risk of all types of cancer was higher in the mainly fulltime to domestic and family work (hazard ratio (HR) 1.49, 95% CI 1.18-1.87), various towards part-time (HR 2.18, 95% CI 1.66-2.86), mainly fulltime (HR 1.75, 95% CI 1.43-2.15), and other/missing (HR 1.47, 95% CI 1.05-2.05) trajectories compared

to the domestic and family work trajectory (reference). Results were similar for breast cancer. For colorectal cancer, the fulltime trajectory had a higher risk. For skin, cervix and lung cancer, no differences between trajectories were found.

Conclusion: This study shows that it is possible to predict the onset of cancer by classifying women into typical employment trajectory groups. In this respect, the results suggest that women's trajectories outside the labour market were associated with a lower risk of cancer. Further research is needed to identify underlying factors, such as health-related lifestyles.

TALK 2: The Socioeconomic Trajectories of Early Adulthood and Associations with Cardiometabolic Health at Age 24 Years

Presenter: Eleanor Winpenny, University of Cambridge

Co-authors: Jan Stochl, University of Cambridge; Laura Howe, Kate Tilling, University of Bristol

Background Socioeconomic factors such as educational attainment are strongly associated with cardiovascular outcomes. However, little is known about the immediate health impacts of socioeconomic exposures during early adulthood. In this study we identify different socioeconomic trajectories of early adulthood (age 16-24y) and assess associations with cardiometabolic health at age 24y. Methods ALSPAC cohort participants with education and employment data across ages 16-24y were included (n=7,568). Longitudinal latent class analysis identified classes following different early adulthood socioeconomic trajectories, based on participation in education and employment, education level attained and occupational class. Cardiometabolic outcomes included body fat percentage, cardiometabolic biomarkers, and structural cardiovascular measures. We modelled differences in outcomes across socioeconomic trajectory classes, adjusting for sex, ethnicity, childhood socioeconomic position, adolescent health behaviours and adolescent health. Results We identified four classes of early adulthood socioeconomic trajectory: (1) Higher Education (41% of the population), (2) Late Education (9%), (3) Part-Time Employment (21%), and (4) Early Employment (29%). The Higher Education class entered employment following completion of higher education, while the Late Education class remained in education at age 24y. The Early Employment class left education and entered employment around age 18y, while the Part-Time Employment class were distinguished by part-time employment throughout early adulthood. Late Education was found to be the healthiest class, with Early Employment the least healthy class, although some differences in patterns were seen across outcomes. For example, estimated percentage body fat was 34.6% (95%Cl:34.0-35.2%) in the Higher Education class, which was similar in the Late Education class (-0.3%, p=0.53) but higher in Early Employment (1.4%, p= 0.003) and Part-Time Employment (1.4%, p=0.01) classes. Conclusion Identification of socioeconomic trajectories provides a person-centred method for assessment of socioeconomic exposures across the period of early adulthood. These trajectories contribute to inequalities in cardiovascular health, which can already be identified at age 24y.

TALK 3: Childhood Income and Medication Use in Adolescence

Presenter: Heta Moustgaard, University of Helsinki

Co-authors: Satu Malmberg, Elina Hiltunen, Lasse Tarkiainen, Pekka Martikainen, University of Helsinki

Socioeconomic resources of the family, including higher parental education, employment, higher income, and wealth are wellestablished determinants of better offspring health. Much less in known about the social patterning of medication use in adolescence and the current evidence is mixed. Furthermore, strong reliance on observational data has made it difficult to establish causality of the associations. This study describes differences in adolescent medication use according to childhood family income. By comparing siblings with discordant childhood income exposures, it also assesses whether these differences are explained by other observed and unobserved familial factors. Administrative register data on full Finnish cohorts born in 1979-2003 (n=1 490 666) was used to assess the probability of using common prescription medications between ages 16-20 according to mean household disposable income in ages 11-16. The use of the three most common prescription medications was more likely among adolescents from high-income families: for each 10% increase in childhood income there was a 0.6-1.7% increase in the probability of using antibiotic, painkiller, and allergy and asthma medications. In contrast, for psychotropic use, a 10% increase in childhood income was related to a 2.5% decrease in probability. In the sibling comparisons, higher childhood income was not related to the use of any medication type. Apart from psychotropics, the results suggest underuse of medications among adolescents from low-income families, because no corresponding differences in underlying health conditions has been found in previous studies. The sibling comparison, however, revealed that childhood income is not an independent predictor of adolescent medication use and that the income differences in use are caused by other, unobserved, family factors shared by siblings. These factors may relate to differential family patterns of treatment seeking and adherence.

TALK 4: Debt Trajectories and Health Issues in Switzerland: A Longitudinal Perspective

Presenter: Boris Wernli, University of Lausanne

Co-authors: Jacques-Antoine Gauthier, University of Lausanne; Tristan Coste, Caroline Henchoz, University of Applied Sciences and Arts of Lausanne; Stéphane Cullati, University of Fribourg

In Switzerland, as elsewhere, the relationship between debt and health remains little studied, even though household indebtedness has become a growing concern in European countries. Previous research shows that debt may be a good predictor of poor health independently of other measures of socioeconomic status like income, education and occupation. However, an important limitation of most research is that it tends to investigate the relationship between debt and health issues cross-sectionally or over a brief period of time. This does not fully capture the fact, highlighted by qualitative evidence and debt counselling services, that debt problems are often characterized by long-term trajectories and that the effects on health are therefore cumulative as households struggle over time to cope with their debt. To overcome this limitation, our presentation will aim to answer two questions: Are there specific debt trajectories in Switzerland and what are they? What are the sociodemographic, socioeconomic and health characteristics associated with these debt trajectories? We use data from the Swiss Household Panel, an annual longitudinal survey of a representative sample of the Swiss population. Our analyses focus on individuals aged 20 to 45 in 2004 (wave 6) and followed until 2019 (wave 21). Debt is measured by arrears of payment (presence

in the household in the last 12 months: no, sometimes, often) which is the most prevalent and problematic type of debt in Switzerland. First, we conduct sequence analyses to identify and classify debt trajectories. Second, we use logistic regression techniques to examine the association of these debt trajectories with sociodemographic, socioeconomic and health characteristics. Our results highlight the importance of considering the frequency, duration and timing of debt through trajectories to fully examine the relationship with health issues.

4F

INDIVIDUAL PAPERS (GENDER AND EMPLOYMENT)

TALK 1: It's Always Me Who Empties the Trash! Interrelations Between Gender Division of Labor, Fairness Perception, and Relationship Quality Among Couples

Presenter: Heike Trappe, University of Rostock

Co-author: Katja Köppen, Rostock University Medical Center

Recently, it has been claimed that gender equality and equity in the family tend to increase partnership stability. The strength of this association, however, depends on prevailing gender relations and the level of social support within society. In the German context, we investigate the association of the gender division of labour among couples and its perceived fairness with relationship quality. Family scholars have devoted much effort to understand this interrelation but surprisingly few studies have addressed the topic longitudinally and still fewer have examined within-individual variations over time. Therefore, we aim at gaining a deeper understanding of the dynamics between partnership quality, the gender division of labour in couples, and its fairness assessment. Based on assumptions of the theories of exchange and equity, we assume that a division of labour that is perceived as fair is key to a mutually benefitting relationship, even more so than the actual division of labour. Taking advantage of five waves of panel data from the German Family Panel (2016/17-2020/21) and supplementing the panel data with retrospective information enables us to follow respondents in coresidential unions over the course of their relationship. Partnership quality is measured in two ways: as self-assessed relationship satisfaction and as subjectively perceived instability of the relationship. The main explanatory variables are the division of housework, and for those with children also the division of childcare, as well as the perceived fairness of the couple's division of labour. We use fixed effects regression models in a structural equation framework to analyse the interrelations among the measures of focal variables. It not only allows us to control for all time-invariant variables but also to test if the impact of the predictor variables on relationship quality varies over time. This is particularly important given that our most recent waves of data cover the Covid-19 pandemic period, for which we assume that perceptions of fairness have become increasingly important for relationship quality. Preliminary findings indicate that the impact of an unequal division of housework on partnership quality is fully mediated by its perceived fairness. In addition, more appreciation and fewer disputes between partners are associated with higher levels of relationship quality.

TALK 2: Intergenerational Transmission of Gender Norms and Women's Participation in the Labor Market

Presenter: Mathias Fondo, Instituto de Economía, FCEA-Udelar

Co-authors: Cecilia Parada, Martina Querejeta, Instituto de Economía, FCEA-Udelar

Gender norms refer to the socially constructed expectations for how women and men should behave in a particular community or society (Bittman et al., 2003). These norms are ingrained in both formal and informal institutions and are learned from a young age through socialization, shaping individual identities, interactions, and institutions (Bittman et al., 2003). This study aims to explore non-traditional factors that may contribute to the rise in women's participation in the labour market, specifically by examining the intergenerational transmission of gender norms related to employment. We investigate whether a woman's decision to work is influenced by exposure to working women during her early life stages, building on the methodology used in Fernández et al. (2004). To measure exposure to working women, we use the average fertility rate of working women relative to non-working women and leverage variations across localities in Uruguay to analyse the intergenerational transmission of gender roles. Our analysis is based on census data, and we find that women born in localities with a higher average fertility rate of working women are more likely to be employed than those who have had less exposure to working women. However, when we estimate the same regression for men, positive correlations are observed, but the magnitude is considerably smaller than for women and not always significant in different specifications.

TALK 3: Full-Time Employment is All That Matters? Decomposing Gender Pension Gaps Based on Relevant Life Course Features in Germany and The Netherlands

Presenter: Carla Rowold, University of Oxford

Gender Pension Gaps (GPG) are so far either analysed based on one life course dimension, mostly the duration in full-time employment, or based on life course typologies from Sequence Analysis. Whereas the first one neglects other dimension such as the timing or ordering of events over the life course as well as other working and family states, the latter risks concealing specific attributes of life courses particularly relevant for pension income inequality.

This study addresses this gap in the literature applying an innovative two-step approach. The first step, Life Course Feature Selection, identifies which work and family life course features are the most important pension income predictors. The second step decomposes the GPG based on these relevant life course aspects only, revealing how they are related to gendered pension income inequality and across the Netherlands and West Germany. Results show that aspects of all life course dimensions (duration, timing, ordering and complexity) play a role. However, pension predictors related to unpaid care work, independently of the life course dimension, are identified as most relevant. Contrary to what previous literature suggested, the duration of full-time employment plays only a subordinate role for total pension income. Despite the contrary pension logics implemented this finding holds for both countries. However, the overall stability of working life courses is a much more relevant predictor of

pension income in the Netherlands compared to Germany. Many of these selected life course aspects have not been identified or assessed empirically previously, at least when it comes to GPGs. Next, I analyze how these most important life course aspects are related with the GPG using decomposition techniques. Highlighting the relevance of specific life course aspects allows policy makers to employ more targeted policies to prevent the reproduction of gender inequalities over the life course in old age.

TALK 4: Gender Segregation in Secondary School Course Choices in Chile: Socio-Economic Gradients and the Protective Role of School Gender Culture

Presenter: Lorena Ortega, University of Chile

Co-authors: Matías Montero, Catalina Canals, Alejandra Mizala, University of Chile

Upper-secondary education, when subject specialization choices start to take place, is a key, yet under-investigated, stage in the development of educational pathways leading to gender segregation across study fields in higher education and the labour market. This study depicts patterns of gendered elective course enrolment across seven broad subject areas in Chilean academic upper-secondary education, investigates their consistency across socioeconomic contexts and identifies school-level moderators. To this end, national administrative data from years 2012- 2021 were analysed using Poisson multilevel models. We found that, net of prior achievement, students make gender stereotypical choices. Consistent with the argument of "indulging gendered selves", the higher the school socioeconomic status (SES), the larger the gender differences in enrolment in Mathematics, Language & literature, and Arts courses, an intersectionality robust to controls for differences in school elective course availability. However, female students in middle and middle-high SES schools tend to choose a larger proportion of Sciences courses, crossing gender boundaries. Also, school gender culture moderates gender segregation: having a higher proportion of older female peers enrolled in, and of female teachers teaching, a given subject area, generally increases the proportion of courses chosen in the area, particularly for girls.

POSTER PRESENTATIONS

POSTER 1: Cohort Profile: The Swedish Families of the 1990s (SWIFT)

Presenter: Ylva B. Almquist, Stockholm University

Co-authors: Viviane S. Straatmann, Tanishta Rajesh, Stockholm University; Josephine Jackisch, University of Fribourg

When parents are unable to raise their children or to meet the minimum acceptable standards for their care, this can lead to involvement with child welfare services. In some cases, children are separated from their families and taken into out-of-home care (OHC). Reasons for such interventions are diverse, often linked to mental health problems in parents. Importantly, however, the families that come to the attention of the child welfare services also diverge in other systematic ways from the general population, for example through more disadvantaged socioeconomic conditions. The data material "Swedish families of the 1990s" (SWIFT) was established in 2022 to study the drivers of inequalities among families involved with child welfare services. SWIFT is a population-based cohort defined as all families with at least one child born in Sweden between 1990 and 1999, including 3 million individuals, linked to 1,075,037 children of the 1990s. This unique data allows researchers to study the linked lives of family members, who are followed through multiple national registers including a wide range of indicators of socioeconomic, psychosocial, and health conditions. Past inquiries have commonly studied socioeconomic disadvantage without discerning the weight and contribution of different contributing factors. The extent to which mental health or socioeconomic disadvantage drive the selection of children into OHC is thus still uncertain. Moreover, after a child has been placed in out-ofhome care, what happens to the parents? Studies on consequences for biological parents have hitherto been limited. Accordingly, it is uncertain whether placement is followed by improvement or deterioration among the parents. Studies based on SWIFT could inform efforts into preventing the conditions of biological parents from reaching a level that requires that the child is placed into OHC, but also efforts aiming to improve the conditions of families once the placement has occurred.

POSTER 2: Association of Schooling or University Type and Subsequent Health in Mid-Adulthood: Evidence from the 1970 British Cohort Study

Presenter: Keyao Deng, University College London

Co-authors: Alice Sullivan, Liam Wright, Richard Silverwood, David Bann, University College London

Background: Existing studies have suggested a favourable association between education and subsequent health. However, these studies have predominantly focused on educational attainment while the type of educational institution attended (which is related to quality of education received) has been overlooked. We investigated associations between type of high school or university attended and multiple subsequent health outcomes in mid-adulthood. Methods: 1970 British Cohort Study were used (N=8107). Type of high school attended (comprehensive; grammar; private) was ascertained at age 16 and type of university (classified as higher (Russell Group) or normal status) was reported at age 42. We investigated ten health measures that capture cardiometabolic risks, physical capabilities, and cognitive function measured at age 46. Multivariable regression models were used, adjusting for sex and childhood socioeconomic, health and cognitive factors. Outcomes were converted to standard deviation (SD) units to aid comparability. Results: In unadjusted models, private school and higher-status university attendance were favourably associated with most health outcomes compared with comprehensive school and normal-status university attendance. After adjusting for potential confounders, associations between private school attendance and cardiometabolic risks and cognitive function remained, with private school attendance associated with lower body mass index (BMI) and blood pressure (BMI: -0.16 SD, 95% confidence interval (CI): -0.06, -0.25; blood pressure: -0.11, -0.02, -0.20) and better performance in all cognitive tasks compared with comprehensive school attendance. No major differences were found between private school and grammar school attendance. At the university level, associations for higher- status university attendance and health

outcomes were largely attenuated, except for cognitive function. Conclusion: The type of educational institution attended was associated with multiple health outcomes—it could therefore be an important under-researched component of health inequalities. Further research is warranted to explore heterogeneity in the associations across different health outcomes and to test the causal nature of the relationship.

POSTER 3: Concurrent and Longitudinal Associations Between EF and Socio-emotional Competence in the Childhood Years

Presenter: Aashna Doshi, University of Bamberg

Co-authors: Sabine Weinert, Huang Wei, University of Bamberg

Previous evidence suggests the cool and hot facets of executive functions (EF) to be related to socio-emotional competence in the preschool years. However, not many studies have examined this relationship both concurrently (i.e., in the preschool years) and longitudinally (i.e., across the primary school years). Therefore, the study aims to include various facets of cool (Phonological working memory, inhibitory control, and Cognitive flexibility) and hot EF (Delay of gratification, effortful control, Negative affectivity and Surgency) to unpack their associations to their preschool and later socio-emotional outcomes (at ages 5, 6-7 and 8-9 years) while additionally controlling for related factors in a longitudinal sample. The role of hot EF facets of negative affectivity and surgency have been studied in the past, however none of the previous studies examined the association of these facets with the other hot and cool EF facets as mentioned above. More specifically, the study shall include 1,898 children from the German National Educational Panel Study (NEPS) and analysed the underlying association by performing various linear regression models. The results may enable domain-specific intervention programs, specific to facets of cool and hot EF that could in turn strengthen socio-emotional development in the preschool period as well as their development across the primary school years.

POSTER 4: Does Polygenic Risk for Psychological Distress Differ by Age? Evidence from the 1958 National Child Development Study

Presenter: Esme Elsden, University College London

Co-authors: David Bann, Praveetha Patalay, University College London

Psychological distress encompasses symptoms of anxiety and major depressive disorders, which affect 549 million people worldwide. Psychological distress is a broader conceptualisation combining the two highly comorbid disorders. Studies observe psychological distress to fluctuate across the life course. On average, psychological distress peaks in midlife adulthood, alongside increases during adolescence and later life. Psychological distress is not a stable condition over time, nor are the risk factors contributing to its development for individuals. Prior research has indicated that genetic factors are more likely to contribute to psychological distress outcomes in individuals who experience early onset and persistent childhood trajectories of psychological distress. We examined the association between polygenic scores and psychological distress at multiple ages. Using data from the nationally representative 1958 National Child Development Study (NCDS; N=~6,000), polygenic scores for psychological distress and major depressive disorder were constructed. Multiple linear regressions will be run between the polygenic scores and the phenotype 9-item Malaise Inventory sum score at ages 23 (1981), 33 (1989), 42 (2000), and 50 (2008) to determine whether the explanatory scope of polygenic risk for psychological distress changes by age. We will assess changes in the magnitude of association from beta coefficients and variance difference by incremental R-squared statistics, controlling for sex and genetic ancestry using ten principal components. Both polygenic scores will be compared to ascertain which reflects the phenotype better. The hypothesis is that genetic contribution will be highest at age 23, with genetic predisposition contributing more to early-onset and childhood persistent distress. This study's findings will improve our understanding of the interplay between genetics and psychological distress across the lifespan. They may have implications for time-specific policy changes to support societal health better.

POSTER 5: Zurich Learning Progress Study 2023-2035: Concept, Design and Opportunities for Collaboration

Presenter: Susanne Ender, University of Zurich Co-author: Martin J. Tomasik, University of Zurich

The Directorate of Education of the Canton of Zurich has mandated a longitudinal study to capture the learning progress of students throughout the entire compulsory schooling. More than 2,000 students will be randomly sampled and followed for at least 11 years, starting in first grade of kindergarten. Core elements that we be assessed throughout the entire period comprise (a) language and math competences, (b) cognitive functioning incl. executive functions, (c) socio-emotional skills, (d) engagement with and disengagement from academic goals, and (e) students' perceptions of their learning contexts as being conducive to fulfil their need for autonomy, competence, and social relatedness. A crucial feature of this study is its high openness for external contributions in terms of thematic or methodological modules (e.g., in-depth interviews, physiological measurements, lab experiments). External contributors will then be able to link their variables with the long-term developmental trajectories of students in the aforementioned domains. The aim of this poster is to present the study design and the measurement instruments used in the longitudinal core assessments, to lay out the opportunities for collaboration, and to answer specific questions about the suitability of topics that can be submitted for review. The first call for modules will be published during or shortly after this conference.

POSTER 6: Understanding Inequalities in Allostatic Load using an Intersectionality Lens: Multi-level Analyses of the UK Household Longitudinal Study (Understanding Society)

Presenter: Ebenezer Essien, University of Stirling

Co-authors: Tony Robertson, Paul Lambert, University of Stirling

The emergence of social inequalities in health can best be situated in the concept of intersectionality. This concept which was first proposed by Crenshaw (1989,1991), aimed at addressing the social injustices confronting black women at the interconnection of gender and race/ethnicity. Intersectionality research has developed to examine the social, economic and demographic categories (such as ethnicity, social class and gender) that interconnect and interact to create modes of discrimination and privilege which can be manifested in worse health outcomes in certain groups within our populations. In turn, intersectional inequalities have been linked to exacerbated health inequalities, but so far research has focused on qualitative explorations of intersectionality, or analysis of wellbeing or disease outcomes.

The aim of our research is to build on emerging work examining quantitative assessments of intersectionality and pre-disease physiological markers (Holman et al, 2020-2022) to incorporate physiological wear-and-tear, as measured by allostatic load, as the keep outcome of interest and incorporate adults across all ages. We hypothesise that combinations of socio-demographic factors will be linked to poorer physiological health and risk of ill health, and that those experiencing several of these factors linked to discrimination simultaneously and over time (e.g., ethnic minority women living in poverty) will in turn have the worst relative health outcomes.

We will present emerging results from analysis of the UK Household Longitudinal Study (UKHLS/Understanding Society) where we have modelled the relationships between intersectionality and allostatic load using multi-level modelling approaches in order to best quantify, test, and analyse stratification positions in the concept of intersectionality.

POSTER 7: Generational Trends in Disability and Chronic Noncommunicable Disease: Evidence from Aligned Analyses of Harmonised Data from the US and Europe

Presenter: Laura Gimeno, University College London

Co-authors: George B. Ploubidis, Alice Goisis, University College London; Jennifer B. Dowd, University of Oxford

As societies age, it is increasingly important to explore whether generations born more recently are living longer without disability or disease. Understanding whether this is the case across high-income countries can be challenging, since research often focuses on individual countries or on a narrow range of outcomes. We explored generational trends in the age-adjusted prevalence for a range of health outcomes (disability, self-reported doctor diagnosed chronic health conditions, and observer-measured blood pressure and grip strength). We drew on harmonised data from the Gateway to Global Aging Data for three sister longitudinal studies of ageing representative of adults aged 50+ from the United States (Health and Retirement Study), England (English Longitudinal Study of Ageing), and Europe (Survey of Health, Ageing and Retirement in Europe). We used data collected in biannual surveys between 2004 and 2018 in a pseudo-cohort design, where respondents were assigned to cohorts according to their year of birth (<1925, and 5-year groups from 1925-1929 to 1955- 1959). Using modified Poisson regression, we explored differences between cohorts for each health outcome adjusting for age. We also explored whether trends differed for men and women, and for those with or without a university degree. We used meta-analysis to explore trends pooled across countries, and to quantify heterogeneity. More recently born generations had a higher prevalence of doctor-diagnosed health conditions adjusting for age. Indicators of functioning improved across successive cohorts, but the stalled for those born in the post-war period. While there was substantial international variation in outcome prevalence across regions, overall patterns across generations appeared similar.

POSTER 8: Transitions from Education to Employment (TREE)

Presenter: Andrés Gomensoro, University of Bern

Co-authors: TREE Team, University of Bern

The aim of the proposed poster is to present the data of the Transitions from Education to Employment (TREE) panel study. TREE is a prospective longitudinal multi-cohort study of school-leavers. So far, two compulsory school leavers' cohorts, 16 years apart (2000 and 2016), are being followed up, allowing for cohort comparisons. TREE is a multidisciplinary study whose design and survey instruments reflect research interests of sociology, economics, education, psychology, public health and other research fields. The study is designed as a social science data infrastructure serving the scientific community at large. The poster describes the study design, the topics covered as well as methodological considerations. The results part describes and compares the main characteristics of the two TREE cohorts' post-compulsory educational and labour market trajectories. The purpose of the poster is to spark interest, generate discussion and promote the data. Scientific use files of all data can be easily accessed online and downloaded free of charge via the QR code that will be printed on the poster.

POSTER 9: Utilizing Uncertainty Regulation Strategies to Manage Person-Environment Misfit and Its Consequences on Retirement Intentions

Presenter: America Harris, University of Hohenheim

Co-author: Ulrike Fasbender, University of Hohenheim

As the global workforce ages, retirement systems call on older workers to remain in the workforce to address labour market shortages; at the same time, older workers want to or have to work longer. However, changes in work environments, and in the values and skills of older workers may lead to person-environment (P-E) misfit, creating uncertainty in work ability. As P-E fit has been shown to decline with age, leading to early retirement decisions; older workers must manage P-E fit to work longer and achieve successful aging at work. However, research examining the mechanisms and boundary conditions between P-E misfit and retirement intentions is limited. The aim of the proposed study is to (1) understand how and through which mechanisms

retirement intentions may be weakened by P-E misfit and (2) identify uncertainty regulation as a late-career strategy. Drawing on the uncertainty regulation model, we propose that utilizing opening behaviours weaken the positive indirect effect of P-E misfit on retirement intentions via uncertainty in work ability due to opening behaviours' focus on future gains. Thereby, opening behaviours serve as a late-career strategy encouraging older workers to remain in the workforce. In contrast, we propose that closing behaviours strengthen the positive indirect effect of P-E misfit on retirement intentions via uncertainty in work ability due to closing behaviours' focus on future losses. The proposed study contributes to research and practice for successful aging at work and uncertainty regulation by identifying the benefits of uncertainty regulation to leverage it as a late-career strategy.

POSTER 10: Ways of Becoming an Informal Caregiver: Results of a Qualitative Interview Study with Adult Children Caring for Their Parents

Presenter: Annika Hudelmayer, University of Applied Sciences Kempten

In Germany and most other European countries, the majority of older people are cared for at home and predominantly by relatives, in most cases by spouses or children. The care is sometimes provided over a period of years with considerable restrictions for their private and professional lives. It therefore represents a profound cut into the personal biography of the caregiver. To date, there are insufficient empirical studies about how this process takes place and how it is experienced by potential family carers. It is particularly interesting to determine at what point family caregivers perceive themselves as such, especially since this is the prerequisite for receiving support in most contexts.

In our study, we conduct qualitative interviews with 18 children of persons in need of care, who have been caring for their parents for at least three months up to 16 years. Using Kuckartz' methodology, the analysis of interviews shows that even though the support needs of aging parents often grow gradually, a specific fall, a diagnosis, or surgery is often stated as the beginning of their designation as an informal caregiver. Discrepancies are particularly evident among interviewees who care for a parent with dementia. It becomes clear that established care-related routines are hardly changed, even if caregivers are provided with support that could improve the described strains.

Accordingly, the results provide an opportunity to better understand the process of becoming a caregiver from the perspective of children caring for their parents and offer initial starting points for integrating support options before care-related routines have already been established.

POSTER 11: The Jyväskylä Longitudinal Study of Personality and Social Development: Late Adulthood Transition or Its Anticipation

Presenter: Katja Kokko, University of Jyväskylä

The transition to late adulthood or its anticipation is described to occur at around age 60. This transition often includes several role transitions or their anticipation, such as grandparenthood, retirement, and/or changes in leisure time and health. Furthermore, it is traditionally viewed as a phase of life characterized by increasing losses and decreasing well-being. It may be that people around the age of 60 are actually more satisfied and in a better health than previously assumed. In the present study, we examined employment and family situation as well as well-being, health, and leisure time activities of the about 60-year-old participants. The participants were drawn from the latest data collection of the Jyväskylä Longitudinal Study of Personality and Social Development (JYLS; Pulkkinen, 2017). In the JYLS, the children who were initially 8 years old (born in 1959; N = 369) have now been followed until the age of 61 (N = 206). At age 60, the participants still represented the initial random sample and the corresponding Finnish age-cohort (Kokko et al., 2023). Three-quarters of the participants were in the workforce, while about 20% were retired (Saajanaho et al., 2022). A bit more than half, 53%, had become grandparents. About 70% assessed their health as very or rather good and, as shown by Reinilä et al. (2023), their level of mental well-being was rather high. Moreover, 90% of the participants expressed satisfaction with the content of their leisure time (Saajanaho et al., 2022). Based on these findings, we can preliminarily conclude that individuals around in the late adulthood transition phase are actively engaged in various societal roles and are in good physical and mental health. Further analyses of the links between transitions and well-being will be conducted.

POSTER 12: ECEC Careers in Germany: Inequalities in Entry Age and Progression

Presenter: Susanne Kuger, DJI - German Youth Institute

Co-authors: Kerstin Lippert, Theresia Kayed, DJI - German Youth Institute

Background: Since 2013, families of children one year and older in Germany are legally entitled to a place in publicly supported early childhood education and care (ECEC). As a result, childcare services in Germany have experienced a massive expansion during the last two decades. Still even up until today, there is a significant shortfall in ECEC provision that varies with the child's age. While in 2021 34 % of parents with a child aged two years or younger used day-care, almost half of the parents (48 %) had a demand for a place. Yet in their last year before school enrolment, by the age of five years, almost every child (95 %) attends ECEC and only 2 % of parents have an unmet demand (Bundesministerium für Familie, Senioren, Frauen und Jugend 2022; Kayed/Wieschke/Kuger 2023).

Contribution and research question: Against this background, we examine ECEC careers of children in Germany in a prospective longitudinal study. Studying inequalities of childcare uptake, we focus on children's age at first entry to ECEC, the preferred format of ECEC chosen for their first entry (institutional childcare setting or family day-care) as well as subsequent changes until children enter school.

Data and Method: Our investigation is based on a large annual panel survey, the "DJI-Kinderbetreuungsstudie" (KiBS), on parental and institutional childcare and the demand for childcare in Germany. We use the information on almost 47,000 children from

the period 2016 to 2020 that entered day-care prior to school enrolment. To explore relations between families' social background and timing of ECEC entry, we apply standard OLS estimation.

Results: Our findings indicate greater differences between Eastern and Western federal states even 25 years after the German re-unification. Firstly, children living in Eastern Germany generally start ECEC around their first birthday. Results for children living in Western Germany in contrast display two different patterns: children enter ECEC either early on (comparable to Eastern Germany) or around the age of three. Secondly, the data shows that children starting their ECEC career in family day-care (in comparison to institutional settings) start earlier (~14 months of age) than children entering into institutional childcare (~22 months). Thirdly, placement changes during the child's ECEC career mostly take place around the age of three and are mainly necessary initiated due to a systematic divide in provisions, i.e., because the child has outgrown the age structure of the previous ECEC provision. Finally, multivariate analyses show that children from households with more than one child, with a migration background and families dependent on unemployment benefits enter ECEC at a later age. In contrast, children with working mothers and from families with a higher level of school education enter day-care at a younger age.

POSTER 13: Adolescent Health Behavior as a Mediator of Effect of Parental Income on Chronic Diseases in Adulthood

Presenter: Nazihah Noor, University of Fribourg

Co-authors: Josephine Jackisch, Arnaud Chiolero, Cristian Carmeli, University of Fribourg

Although the social gradient in health has been well documented, the mechanisms by which early life socioeconomic disadvantage impairs adult health are not fully understood. One potential mechanism is differential exposure, whereby socioeconomic disadvantage (e.g., low parental income) increases exposure to unhealthy behaviours. At the same time, groups across different socioeconomic levels (e.g., low vs. high parental income) may experience different effects of health-related behaviours, which constitute the mechanism known as differential susceptibility. In this study, we aim to assess these mechanisms by which health-related behaviours in adolescence could mediate the effect of parental income on chronic disease risk in adulthood. We will use the National Longitudinal Study of Adolescent to Adult Health cohort, an ongoing longitudinal study from the United States. We will conduct a counterfactual mediation analysis of the effect of parental income during adolescence (exposure) on adult cardiometabolic and cancer diseases (outcome) with adolescent health-related behaviours as a mediator. Through this, we will estimate the portion of the effect that is attributable to differential exposure to unhealthy behaviours and the portion of the effect that is attributable to differential exposure to unhealthy behaviours. This study will provide novel empirical evidence on the mechanisms by which early life socioeconomic disadvantage increases the risk of chronic diseases in adulthood. Importantly, increased susceptibility to adolescent unhealthy behaviours among those having experienced low parental income may require prioritization of preventive policies targeting these susceptible population groups in order to mitigate socioeconomic inequalities in chronic diseases.

POSTER 14: Effects of Husbands' Transfer on Women's Labor Supply and Subjective Well-being: Insights from Longitudinal Data in Japan

Presenter: Kayo Nozaki, Osaka University of Economics

This study examines the impact of the relocation of spouses on the labour supply, and the subjective well-being of wives, using large-scale longitudinal data from Japan. Many Japanese companies include regulations for the relocation of their staff for business purposes, making it difficult for employees to refuse such transfers. If a married man is transferred, his wife could either quit her own job and relocate with her spouse and family, or stay behind with family, while the husband moves to the new location alone. With a declining birthrate, and aging population in Japan, the utilization of women in the workforce has become increasingly important, but spousal relocation can be a major obstacle to a wife's continued employment. Therefore, we analyse changes in employment and subjective well-being before and after relocation, using large-scale survey data. Specifically, we use random effects models, controlling for individual heterogeneity, to estimate the size of labour supply and changes in subjective well-being for both, wives and husbands, separately in both the above-mentioned cases, i.e., where the family moves together or only the husband relocates. As a result, we found that husbands' working hours decreased when moving with their families but increased when shifting alone. Husbands' life satisfaction was found to be higher when moving with their families, but lower when they moved alone. For wives accompanying their husbands, both the probability of employment and working hours are lower, with a particularly significant decrease during the relocation period, rather than before or after the move, indicating that wives adjust their employment in response to their husbands' job transfers. The life satisfaction of wives decreased after relocation when accompanying the family, while it decreased both, during and after relocation, when the husbands were on solo transfers.

POSTER 15: Implementation of First-Time Mothers' Working Plans Three Years After Childbirth

Presenter: Fuzsina Ökrös, HCSO-Hungarian Demographic Research Institute

Introduction Due to the generous allowances system, and the common preferences for traditional gender roles, mothers typically stay at home for up to three years after childbirth in Hungary. The aim of this research is to investigate how the future employment plans of pregnant mothers, in relation to the timing of employment, evolved three years after giving birth. Methods The descriptive analyses are based on the results of the first, fourth and fifth waves of Cohort '18 – Growing Up in Hungary, among mothers who were expecting their first child during the first wave (n=1378). Results Based on pregnant women's future work plans, it appears that the largest proportion (35.8%) were planning to work once their child was aged between 2 and 3 years, while 32.2% were planning to work when the child was 1-2 years. Overall, 75.6% of mothers planned to work until their child was 3 years old, compared to 42.4% of mothers who were actively working at the time of the fifth survey. The largest proportion (23.7%) started working between the second and third year after childbirth. Observing the plans about future employment, roughly 20% of mothers started working at the time they had planned to do so during the pregnancy. 19.6% of

those who planned to work between the child ages of 0-6 months, 13.2% of those who planned to work between 6 months and 1 year, and 23.2% of those who planned to work between 1 and 2 years fulfilled their plans. Among mothers who planned to work after the child third birthday, 30% had already started working, while the remaining 70% were still inactive at that time. Conclusion All this suggests that only a fifth of mothers can meet their previous work plans, while the majority are characterised by an extension of the planned time.

POSTER 16: The Diversity in the Typical Patterns of Partnership Trajectories Associated with Lifetime Childlessness: How is it Related to Socioeconomic and the Family of Origin's Characteristics?

Presenter: Alice Rees, Université Catholique de Louvain

Co-authors: Christine Schnor, Université Catholique de Louvain; Marika Jalovaara, University of Turku

Ultimate childlessness has been increasing in most industrialized countries, especially in Northern Europe, during the last decades. Therefore, a large number of studies emerged regarding trends and determinants of childlessness, with different data sources. Several studies showed the important role of partnership histories when studying childlessness, with being never partnered and partnership instability as the strongest determinants of childlessness. Although childlessness has gained increased research interest, we know little about how individual characteristics and childhood background variables relate to the different types of partnership trajectories that individuals experience. Using the typical patterns (clusters) of partnership trajectories associated with childlessness obtained by Rees, Schnor & Jalovaara (forthcoming), we study how childhood and young adulthood characteristics relate to the sequencing, timing, and quantum of partnership histories. With random samples from the full population register data on men and women born in 1975 in Belgium, we run multinomial logistic regression methods with the typical patterns of partnership trajectories as a dependent variable. We also consider how the turbulence in partnership trajectories relates to individual socioeconomic characteristics. Preliminary results showed that educational attainment, gender, and the family of origin's characteristics (parent's education, birth order and number of siblings) significantly influence the probability of experiencing one of these typical patterns of partnership trajectories, and then more likely to remain childless.

POSTER 17: Intimate Partner Violence in the Context of Parental Separation: Prevalence and Risk Factors

Presenter: Julia Reim, DJI - German Youth Institute

Co-author: Sabine Walper, DJI - German Youth Institute

While separation might offer the chance to end existing intimate partner violence (IPV), it may also lead to a first-time occurrence or an escalation of violence in some cases, especially in the context of child-related court disputes and contact regulations (Jaffe et al., 2014). Evidence suggests that perpetrators of IPV often use children to control their ex-partners during and after separation (Beeble, 2007). IPV is further associated with a variety of influencing factors, including gender, younger age and immigrant background (BKA, 2021). However, the question arises as to which risk factors are associated with IPV in the context of parental separation. In addition, it is unclear how often IPV during separation appears as a continuation of a pattern of violence or as a first-time occurrence. Yet, longitudinal studies looking at prevalence and risk factors of IPV in the context of separation in families with children are scarce, especially with German data. This study therefore aims to fill this gap by using pooled data from waves 1 – 13 from the German Family Panel pairfam to 1) reveal the prevalence of IPV in the context of separation in families with children and to 2) identify risk factors of IPV in this context. Among 880 parents who separated from their ex-partner in the course of the survey, 11.9 % reported IPV in the context of separation committed by one of the ex-partners or both. Preliminary analyses indicate that the report of IPV at the time of separation is linked to younger age, female gender, lower education, a higher number of children and higher conflict levels between partners prior to separation, but not to immigration background or financial deprivation. Data from waves prior to the separation are further used to examine longitudinal influences of preseparation factors, such as partnership- and child-related variables.

POSTER 18: Parental Personality Traits and Family Related Mental Health Care Use: Longitudinal Findings

Presenter: Annika Schunke, DJI - German Youth Institute

Co-authors: Sabine Walper, DJI - German Youth Institute

Background: Personality traits have been linked to physical and mental health, health behaviors, and both general and mental health care use (MHCU). Especially neuroticism was found to have a strong and consistent association with MHCU. There is a lack of studies examining this association in the family context. Hence the relationship between parental personality traits and child, adolescent or family related MHCU was examined. As parents can be considered as door openers for their off-spring's access to appropriate treatment, the paper aims to identify and understand parental individual factors that may support or prevent seeking for family related mental health care in a longitudinal perspective.

Material and Methods: This study uses longitudinal data of the German family panel pairfam. The sample included parents offering information on the Big Five personality traits (Wave 2, Wave 6, Wave 10 and Wave 11) and the utilization of child, adolescent or family counselling services (Wave 8, Wave 10, Wave 12), controlling for sex, gender, education, family structure, regional and socioeconomic factors.

Results: Preliminary analysis show that the usage of family or child related counselling services is low and does hardly change across waves. Personality traits also appear to remain stable across the examined waves. Regression analysis show a significant association between neuroticism and MHCU. Further analysis is pending.

Conclusion: The results confirm previous findings and contribute to a better understanding of individual factors in the family context and its association to the utilization of family and child related counselling services.

POSTER 19: Motherhood and Individual Poverty Risk Within Coupled Households: Analysing the Interplay of Family and Poverty Trajectories in Germany

Presenter: Christina Siegert, University of Vienna

Women, particularly mothers of small children, often rely on their partner's income to avoid poverty. During the early childrearing phase, gender disparities in employment and income are most pronounced. However, available research on individual poverty risks within coupled households is scarce and has not yet focused on the role of parenthood as a critical driver of female poverty risks. Prior studies on the impact of childbirth on poverty usually studied household poverty risk and focused primarily on the short term instead of the longer-term effects. This study addresses these research gaps by contrasting the poverty trajectories of partnered women and men in Germany from the transition to parenthood throughout the early childrearing years. It examines gender-specific poverty trajectories using two scenarios: one where partners have access to each other's income (assessing household poverty risk) and another where they do not (assessing individual poverty risk). This way, the study accounts for partners' economic interdependence from a linked lives perspective. Drawing on longitudinal data from the German Socio-Economic Panel (SOEP), I apply multi-channel sequence analyses to reconstruct typical household and individual poverty trajectories of partnered individuals in the early child-rearing years, stratified by gender, education and region. Differences in gender-specific poverty trajectories by education and region are examined (1) because education is an important factor in understanding gender inequality and (2) because Germany still has a comparatively traditional gender culture in the West and a more female employment-oriented one in the East as a consequence of the country's divided history. The goal is to provide a holistic picture of gender-specific poverty risk trajectories during this stage in the family life cycle in West and East Germany and to improve our understanding of childbirth as a poverty-triggering event for partnered men and women at different levels of education.

POSTER 20: Job Quality, Cortisol and Allostatic Load: A Multi-Group Moderation from the English Longitudinal Study of Ageing

Presenter: Thomas O'Toole, University of Manchester

Co-authors: Kimberly Dienes, Swansea University; Christopher J. Armitage, Martie van Tongeren, University of Manchester Evidence suggests that chronic cortisol excess may precede the development of an allostatic load, and that these associations may differ by the level of work stress. This study aims to investigate the associations between hair cortisol concentration and the development of systemic allostatic load cross-sectionally and at a lag of four years, stratified by level of effort-reward imbalance.

The sample consisted of respondents from the English Longitudinal Study of Ageing who were in employment with hair cortisol measurements at wave 6, and allostatic load markers at waves 6 and 8 (n=411; 64% female). Hair cortisol was used as a measure of total cortisol expression over the preceding two months. Allostatic load was modelled as a count-based index using nine markers: three per system, across the immune, metabolic and cardiovascular systems. This model was then grouped by a mediancut effort reward-imbalance scale (0.83) and regression pathways were compared between groups using a series of Chi-Squared tests of difference.

Higher hair cortisol concentrations were associated with an increase in immune and cardiovascular allostatic load cross-sectionally, and a metabolic allostatic load at a lag of four years. These pathways were found in the high effort-reward imbalance group, but not in the low effort-reward imbalance group. There were significant differences found between groups for hair cortisol concentration as a predictor of both immune and cardiovascular allostatic load.

Findings may indicate a novel temporality to the accumulation of an allostatic load, and that the "tipping point" between allostasis and allostatic load may lie within the ability of the HPA axis to regulate the immune and cardiovascular systems.

POSTER 21: Investigating the Progression of False Belief Understanding in Taiwanese Toddlers Across Time

Presenter: Yueh Huey Wang, National Pingtung University of Science and Technology

The primary objective of this research was to explore the development of false belief comprehension in Taiwanese toddlers. This was achieved by conducting assessments on a sample of 79 toddlers and dividing them into four age groups, namely 16, 18, 21, and 24 months. The study also aimed to investigate the variations in false belief scores among toddlers, based on their background characteristics. Furthermore, the research sought to evaluate any changes in false belief comprehension over a period of three months.

The key findings were as follows: Firstly, the rate of Taiwanese toddlers passing the false belief understanding task increased with age, with 21 months being a significant turning point for developing false belief understanding. Secondly, the development of false beliefs in Taiwanese toddlers was found to be influenced by social and cultural factors. The pass rate of the false belief test was lower than that of English-speaking countries, indicating that the development of false beliefs in toddlers is not universal. Lastly, the study found that language ability and maternal education level impacted false beliefs of toddlers at T1 and T2. This suggests that toddlers with high language scores and those with highly educated mothers demonstrated stable passing rates for the false belief test, supporting previous research that highly educated mothers provide more diverse and abundant resources that facilitate toddlers' earlier development of understanding of false beliefs. These findings could have important implications for the development of educational and parenting strategies to support the development of false beliefs in young children.

POSTER 22: Negative Experiences and Identity Structure in Adulthood

Presenter: Hitomi Watanabe, Kochi University

Negative experiences often have adverse effects on physical and psychological health. The degree to which a past negative event becomes central to identity has been measured using certain scales; however, these do not explain the structural characteristics of such an identity state. Based on the notion that an individual's general identity can be captured by context-specific identities, this study investigates relationships between past negative events and structural characteristics of identity in adulthood. Participants comprised 141 adults (46 men, 95 women; M = 42.07 ± 11.01 years) who have construed past negative events as central to their identity. Participants completed a questionnaire seeking information on a past negative event, event centrality, contexts in which they participate (e.g., home, workplace), and contexts associated with the past negative event; thereafter, interrelationships between context-specific identities—and the content to which each context-specific identity is personally revealing—were evaluated. Approximately 43% of participants participated in only one context, namely, that associated with the negative event central to their identity. For those participating in more than two contexts, the percentage of event-related contexts in their total participating contexts was not necessarily large. For men, the more central to identity the past negative event was, the more self-revealing event-unrelated context-specific identities were, that is, the more impact these identities have on general identity. For women, negative event centrality was associated with the stronger relevance between contextspecific identities. These results suggest that there are different types of identity structures when negative experiences are construed as central to identity. Active participation in broader contexts unrelated to the past negative event and establishing new self-revealing identities—and, for women, weakening the highly interrelated relationships between context-specific identities by adding new identities—might be a useful strategy for high negative event centrality to identity.

DAY 2 Tuesday 10th October 2023

KEYNOTE PRESENTATION 2

Structure and Agency in the Life Course: Findings from the German Longitudinal Three-Generation Study Life

Presenter: Fred Berger, University of Innsbruck

LifE is a German prospective longitudinal three-generation study with multiple advantages in the field of life course research. The study's unique characteristics consist of its long observation period of the anchor generation (G2) from 12 to 45 years of age, the broad survey of different domains, and the investigation of three intra-family generations in a multi-actor approach. The core of the study is a 5-wave panel survey of the life course and psychosocial development of a cohort of adolescents (G2) born between 1965 and 1967 and their parents (G1). In 2002 and 2012 the study of G2 continued, becoming one of the longest longitudinal life course studies in the German-speaking world. In addition, in 2012, a sample of G2's adolescent children (G3) participated in the study. The data structure of the study permits processing of questions concerning individual development over several stages of life in the context of family relations and in different domains, as well as the investigation of intergenerational continuities and discontinuities across three generations. According to the theoretical framework of agency and structure, LifE study attempts to capture an interdisciplinary view of the reciprocal and changing relationship between an active developing person and his or her changing contexts.

In the keynote, the methodological concept and theoretical framework of LifE will be elaborated in more detail, including the design of the planned continuation of the project in 2024. Furthermore, results on the interplay between agency in youth and in later life and structural factors in the educational and social life course will be presented. The presentation will address issues such as continuity and discontinuity in parent-child relations from adolescence to adulthood, the prediction of marital quality and marital instability in adulthood, and intergenerational transmission processes in the realm of parenting beliefs and parenting practices.

5A SYMPOSIUM

Inequalities in Lifelong Learning: New Evidence from the German National Educational Panel Study

Convenor: Steffen Schindler, University of Bamberg

The German National Educational Panel Study (NEPS) provides a unique data source to study educational trajectories throughout the entire life course. In this symposium, we focus on adult education and lifelong learning, which are increasingly important elements of education processes in knowledge-based societies. We assemble contributions that are based on the adult cohort of the NEPS. The four papers provide new evidence on various aspects of education in adult age and related social inequalities. The papers exemplify the rich analytical potential of the NEPS for longitudinal analysis in the context of lifelong learning. The first paper deals with the development of gender inequalities in job-related training during the COVID-19 pandemic. The second paper also considers influences of the COVID-19 pandemic and asks whether it changed the Matthew effects that typically can be observed in job-related training. The third paper is concerned with supply- and demand-side effects of business-cycle effects on the prevalence of further education. The fourth paper takes a look at social reproduction processes and asks to what extent formal educational upgrading processes alter the association between social origin and earnings.

TALK 1: Gender Inequalities in Job-Related Training During the COVID-19 Pandemic: Longitudinal Evidence from Germany

Presenter: Gundula Zoch, University of Oldenburg

Co-authors: Christina Haas, Corinna Kleinert, Leibniz Institute for Educational Trajectories

The COVID-19 pandemic and its associated economic and social consequences have had well-documented stratified impact, however, evidence regarding altered job-related training remains scarce. Drawing on earlier findings on gender-specific crisis-effects on employment and family life, we investigate gender and family differences in the effect of the pandemic on non-formal job-related training participation. Applying a theoretical framework based on expectancy-value theory, altered opportunity structures, and time availability approaches, we argue that women and mothers are among the most vulnerable groups affected by government-imposed restrictions and related economic and social consequences.

We combine high-quality panel data from Germany (NEPS, N=9,078), including information on training participation in one precrisis year (2019) and two during the pandemic (2020 and 2021), with regional administrative data on daily COVID-19 incidence rates and government-imposed restrictions at the district level. Descriptive results show a strong decline in training participation for men and women with and without children, particularly in the first year of the pandemic (2020/21) and among men. Preliminary results from fixed-effects regression models confirm a more negative effect of regional high-risk environments on training, with stronger declines for childless individuals. This suggests that children may have influenced training participation independently of the regional COVID-situation. When accounting for variation in imposed restrictions and altered employment and family characteristics, results suggest that fathers were the least affected by pandemic-related restrictions and consequences. So far, our preliminary results suggest significant changes in job-related training participation and increased inequalities among the intersection of gender and family.

TALK 2: Did the Covid-19 Pandemic Strengthen or Weaken Matthew Effects in Job-Related Training?

Presenter: Corinna Kleinert, Leibniz Institute for Educational Trajectories

Co-authors: Christina Haas, Leibniz Institute for Educational Trajectories; Gundula Zoch, University of Oldenburg

Participation in job-related further training is characterized by strong Matthew effects: it benefits mainly those who are already better off. At the start of the pandemic, many researchers assumed that these inequalities would be further exacerbated by the crisis. Evidence that looks at later stages of the pandemic, however, often arrives at more nuanced findings. This is also true for further training. On the one hand, many firms cut back their investments in training due to economic uncertainty, and participation in on-site forms of learning was limited. On the other hand, the pandemic triggered digitized learning opportunities and a need to learn new processes, tools and routines in many jobs. In this paper, we ask how these trends affected educational inequalities in learning and what influence regional incidence rates and restrictions as well as changing working conditions had on them.

To answer these questions, we use three waves of large-scale panel data for employed adults in Germany born in 1955-1986 (NEPS-SC6) collected before (2019/20) and during the pandemic (2020/21 and 2021/22), which we combine with district-level data on Covid-19 incidence rates and restrictions. We use pooled OLS and fixed-effects regressions to analyse between- and within-person effects of the crisis. Initial results show a decline in job-related training in the two pandemic years, particularly in on-site events and courses, which was more severe for employees with higher educated and higher-status and those in firms with more training. Hence, Matthew effects declined. Working conditions had more complex effects, particularly between groups of employees. In contrast, the regional impact of the pandemic hardly affected participation in job-related learning activities.

TALK 3: The Role of Risk and Status Preference for Business-Cycle Effects on Further Training

Presenter: Dominik Becker, BIBB - Federal Institute for Vocational Education and Training

Co-authors: Marion Thiele, Myriam Baum, Harald Pfeifer, BIBB - Federal Institute for Vocational Education and Training Prior research shows that business-cycle effects (BCEs) may influence both firms' supply and individuals' demand for further training (FT). However, both the theoretical state of research and corresponding empirical findings are inconclusive: On the one hand, recessions may foster firms' propensity to invest in FT, e.g., due to lower opportunity costs. On the other hand, firms might attenuate their investment in FT during recessions, e.g., due to decreasing sales. Changes of firms' supply of FT influences individuals' opportunity structure and thereby their participation chances. Moreover, individuals could use potential gains in temporal resources during recessions to invest in FT, e.g., when being unemployed.

Like derivable theoretical predictions, empirical findings on BCEs on FT point in different directions: some studies observe positive effects, some find negative effects, and some no effects at all. In this paper, we aim to provide empirical results that avoid two potential sources of observed empirical inconsistencies in previous research: 1) heterogeneity between studies in the measurement of FT and/or BCEs, and 2) a lack of precision in the measurement of the underlying social mechanisms. Concerning 1), we analyze effects of several measures of BCEs, e.g., annual GDP or quarterly/annual national unemployment rates, on individuals' participation in both firm-financed and individually-financed FT. Concerning 2), we explore the role of individuals' risk and status preferences as potential mediators of BCEs on FT. Preliminary analyses using NEPS-SC6 reveal that BCEs on FT vary along both measures of BCEs and forms of FT. In contrast, the role of individuals' risk and status preferences as potential mediators of BCEs on FT appears to be limited.

TALK 4: Educational Upgrading and Social Inequality in Earnings

Presenter: Anja Grauenhorst, University of Bamberg Co-author: Steffen Schindler, University of Bamberg

This paper deals with the role of further education in the status attainment process. Considering that education serves as the key mediator of the association between origins and destinations, lifelong learning adds a dynamic element to social mobility as it alters the origin-specific distributions of education. This paper focuses on a specific part of lifelong learning: the upgrading of formal educational credentials after labour market entry. We want to find out whether and in which way formal educational upgrading activities after labour market entry change the strength of the association between social origins and earnings over the life course.

Previous research finds that educational upgrading processes do not alter the association between social origin and own social status. We add to that research by focussing on earnings as outcome variable instead of social status. In contrast to social status measures, earnings also capture variation within occupations.

For our empirical analyses, we draw on survey data from the National Educational Panel Study (NEPS), starting cohort 6 linked to administrative earnings data (NEPS-ADIAB). These data comprise complete labour market and earnings trajectories of persons born between 1944 and 1986. Our analyses are based on growth curve models to show the evolution of wages since labour market entry by social origin, measured trough EGP classes. We then decompose to what extend social differences in upgrading of formal education have a compensating or reinforcing influence on that development. Our first results point to a minor compensating effect.

5B SYMPOSIUM

Lifecourse Trajectories and Patterns of Childhood Adversity in Relation to Social and Health Outcomes in Childhood, Adolescence, and Young Adulthood

Convenor: Leonie K. Elsenburg, University of Copenhagen

The experience of childhood adversity, such as illness in the family, parental separation, or foster care placement, has been related to later-life health as well as social outcomes. However, many studies on childhood adversity measure the experience of adversity by retrospective self-report, making these studies prone to recall bias. In addition, differences in the type, timing and duration of adversities may affect the association with outcomes but are rarely considered. Therefore, there is a need for prospective studies that consider these factors in relation to outcomes. We established The DANIsh LIFE course (DANLIFE) cohort study that includes all individuals born in Denmark between 1980 and 2015. In DANLIFE, information on the annual occurrence of different childhood adversities and various health and social outcomes is routinely collected from the Danish registers.

In this symposium, we discuss the various approaches we used to generate life course trajectories and patterns of exposure to adversity over the first 1000 days and throughout childhood. We compare these approaches and the patterns they generate, and present results of studies examining the longitudinal and prospective association between childhood adversity and social, mental health and physical health outcomes in childhood, adolescence and young adulthood.

TALK 1: Adversities During the First 1000 Days of Life and Psychiatric Disorders in Childhood and Adolescence

Presenter: Megan Davies, University of Copenhagen

Co-authors: Naja Hulvej Rod, Swapnil Mishra, Leonie K. Elsenburg, Meenakshi Dubey, Søren Dalsgaard, Samir Bhatt, David Taylor-Robinson, Andreas Rieckmann, University of Copenhagen

Background: The first 1000 days of life (conception to 2 years) is a critical period for defining health and wellbeing throughout the life course. Studies have shown that adversities occurring in early childhood are related to an increased risk of psychiatric disorders in later life. However, many of these studies do not consider that different types of adversities can differentially impact mental health.

Objective: We aim to examine how factors occurring during the first 1000 days of life, including biological vulnerabilities and familial adversities, act in synergy and whether specific combinations of these factors further increase the risk of psychiatric disorders in childhood and adolescence.

Methods: We use Danish register-based data to include all children born in Denmark during the period 1988-2000, followed up until 2018, and estimate the risk of receiving a primary diagnosis of any psychiatric disorder (ICD-10 codes F00-F99, ICD-8 codes 290-315) between age 2-18 years. To identify patterns and clustering of adversities in the first 1000 days, we use the Causes of Outcome Learning method. This machine learning approach allows us to simultaneously examine how adversities and other vulnerabilities that occur during the first 1000 days of life interplay with one another, as well as identify subgroups across the exposures, that may be at an increased risk of developing a psychiatric disorder.

Results: We will show how specific combinations of adversities interrelate with each other to increase the risk of being diagnosed with a psychiatric disorder in childhood and adolescence.

TALK 2: Application of Life Course Trajectory Methods to Childhood Adversity Data: A Comparison of Sequence Analysis and Group-Based Multi-Trajectory Modeling

Presenter: Leonie K. Elsenburg, University of Copenhagen

Co-authors: Andreas Rieckmann, Jessica Bengtsson, Andreas Kryger Jensen, Naja Hulvej Rod, University of Copenhagen Objective: We compare the application and results of two methods to generate general trajectories of adversity over childhood, i.e., sequence analysis and group-based multi-trajectory modelling (GBTM).

Methods: We used Danish nationwide register data on 926,160 individuals born between 1987 and 2001, including information on the yearly occurrence of 7 childhood adversities in 2 dimensions (i.e., family poverty and family dynamics). We constructed childhood adversity trajectories from 0-15 years by applying (1) sequence analysis using optimal matching and cluster analysis using Ward's method and (2) GBTM using logistic and zero-inflated Poisson regressions. We identified 2 to 8 cluster solutions using both methods and determined the optimal cluster solution for both methods.

Results: For both methods, the optimal cluster solution contained 5 clusters. Both methods generated a low adversity, a poverty, a late adversity, and a persistent adversity cluster. The fifth cluster using sequence analysis was a household psychiatric illness cluster and the fifth cluster using GBTM was an occasional adversity cluster. Compared with the solution obtained through sequence analysis, the solution obtained through GBTM contained less individuals in the low adversity cluster and more in the other four clusters.

Conclusions: The two methods generated qualitatively similar solutions, but the quantitative distributions of children over the clusters were different. The method of choice depends on the type of data available and the research question of interest. We provide a comprehensive overview of important considerations and benefits and drawbacks of both methods.

TALK 3: Trajectories of Childhood Adversities and Later Risk of Belonging to a High-Need User Group in Denmark: A Population-Based Cohort Study Across Three Different Welfare Sectors

Presenter: Bertina Kreshpaj, University of Copenhagen

Co-authors: Leonie K. Elsenburg, Signe Hald Andersen, Tjeerd Rudmer de Vries, Karsten Thielen, Naja Hulvej Rod, University of

Copenhagen

Objective: To investigate whether childhood adversities increase the risk of becoming a high-need user across three welfare domains – health, social-welfare and justice- in young adulthood.

Methods: We used Danish nationwide register data on 586,297 individuals born between 1980 and 1990 and followed-up between 1998 and 2020. We divided individuals into five trajectories based on annual exposure to childhood adversity across three dimensions, ie. material deprivation, loss or threat of loss within the family, and family dynamics, from age 0-15 years. For each of the welfare domains, we defined high-need users as the top 10% of users in that sector based on their number of hospital visits, weeks of social welfare use and number of committed crimes. Adjusted logistic regression models were used to estimate the relative risk of belonging to a high-need user group when in any of the childhood adversity groups vs. when in the low adversity group.

Results: In the adjusted regression models, individuals in the group with high exposure to childhood adversity were found to have a higher risk of belonging to the high-need user group, across all three welfare sectors, than individuals in the group exposed to low levels of childhood adversity.

Conclusions: In this study, we show that the experience of childhood adversity is associated with a higher risk of belonging to a high-need user group across multiple social welfare domains in young adulthood. Early-years interventions within this population could yield very large reductions in economic burden.

TALK 4: Early Childhood Adversity and Body Mass Index in Childhood and Adolescence: Linking Registry Data on Adversities with School Health Records of Over 50,000 Children from Copenhagen

Presenter: Leonie K. Elsenburg, University of Copenhagen

Co-authors: Andreas Rieckmann, Jessica Bengtsson, Theis Lange, Jennifer L. Baker, Thorkild I. A. Sørensen, Naja Hulvej Rod, University of Copenhagen

Objective: We examined whether childhood adversity experienced in early childhood (0-5 years) is related to body mass index (BMI) in childhood (6-7 years) and adolescence (12-15 years).

Methods: This study combined data from the register based DANLIFE study with height and weight data of school children in Copenhagen. Data were available for 53 401 children born in Denmark between 1980 and 1996. Children were divided into groups of early childhood adversity by applying group-based multi-trajectory modelling using their yearly count of childhood adversity in three dimensions (i.e., material deprivation, loss or threat of loss and family dynamics) from 0-5 years. Direct and total associations between the early childhood adversity groups and BMI z-scores in childhood and adolescence were estimated using sex-stratified structural equation models.

Results: Five groups of early childhood adversity were identified, which were characterized by low adversity (51%), moderate material deprivation (30%), high material deprivation (14%), loss or threat of loss (3%) and high adversity (2%). Boys and girls exposed to moderate or high material deprivation and loss, or threat of loss had a slightly higher BMI z-score, especially in adolescence, compared with those in the low adversity group. Additionally, boys in the high adversity group had a slightly lower BMI z-score in childhood than boys in the low adversity group.

Conclusions: The identified associations and their effect sizes suggest that weight-for-height changes is probably not a major explanatory mechanism linking childhood adversity with later life morbidity.

5C SYMPOSIUM

Strengthening Sequence Analysis

Convenor: Matthias Studer, University of Geneva

Sequence analysis (SA) is one of the key approaches to study processes and trajectories from a life-course perspective. It provides a holistic view of trajectories by creating a typology that can be then used in subsequent analyses or simply to describe these trajectories. This symposium presents the first results of the "Strengthening Sequence Analysis" research project aiming to address several remaining issues of SA, including:

- The proper handling of missing data in SA. Based on an extensive simulation study, several multiple imputation methods for categorical data are evaluated before drawing guidelines on the best methods.
- The choice of a clustering algorithm. Based on a second simulation study, several clustering algorithms are evaluated, before issuing practical guidelines based on the data characteristics and the research question at hand.
- A new methodology to properly study the relationship between trajectories and covariates by accounting for the estimation errors of a typology that can be expected when working with sample data.
- An original application of sequence history analysis aiming to understand how an unfolding trajectory is linked with a later-life event.

TALK 1: Comparison of Imputation Methods for Categorical Life-Course Trajectories

Presenter: Kevin Emery, University of Lausanne

Co-authors: Matthias Studer, University of Geneva; André Berchtold, University of Lausanne

The life-course paradigm has gained increasing importance in the social sciences over the last decades and proved its contributions in numerous disciplines ranging from sociology, demography, gerontology, and medicine to psychology. This paradigm insists on the need to study, not only the situation at a given time point, but also its evolution over the life course in the medium or the long run. These trajectories are then often described with categorical data. For instance, the school-to-work literature focuses on professional integration trajectories following compulsory education, distinguishing between education, employment or unemployment.

This life-course perspective therefore implies the use of longitudinal data over the medium to the long run. This data requirement is highly sensitive to missingness, because it multiplies missing data occasions and retrospective questions tend to be more difficult to answer. The lack of a commonly accepted solution to handle missing data is one of the major challenges faced by life-course methodology. This paper aims to review the solutions proposed so far, and to assess their practical relevance using real data on which we simulate different missing data mechanisms. In the meantime, we also explore several extensions of these methods. By doing so, we aim to provide clear methodological guidelines and to strengthen missing data handling in life-course research.

The results show that multiple imputation is always better than complete case analysis. Furthermore, a proposed extension of the MICT algorithm (Halpin, 2016) shows the best performance to impute categorical data, except for small sample sizes, where the original version of the algorithm performs best.

TALK 2: Sequence Analysis and Clustering Algorithms: A Simulation Study

Presenter: Leonhard Unterlerchner, University of Geneva

Co-authors: Matthias Studer, University of Geneva

Sequence Analysis is considered a key method for holistic life-course analysis. Sequence Analysis is mostly used to build a typology of trajectories, which is built in two consecutive steps. First, the trajectories are compared using a dissimilarity measure. Second similar pathways are grouped using cluster analysis. To date, this second step has received scant attention from the Sequence Analysis community despite its great influence on the results (Liao et. al, 2022). Some authors advocated for one solution or the others, but an overall evaluation of their respective strengths and weaknesses for different situations is still missing.

As noted by Hennig (2015), no general recommendation of a clustering algorithm can be made. However, one might draw domain-specific recommendations depending on the data characteristics and the study's aims. We use simulations to draw recommendations on clustering algorithm use. We generate trajectories by varying the structure strength, the relative presence of outliers or hybrid cases, and the size and number of groups to be found in the data.

Results show that the choice of algorithm has to be made according to both the aim of the clustering and the data properties. Fuzzy algorithms show good performances in the presence of weakly structured data, which are common in social sciences.

TALK 3: Assessing the Robustness of Regression Results Based on Sequence Analysis Typologies: A Bootstrap and Mixed-Effects Model Procedure

Presenter: Leonard Roth, University of Lausanne

Co-authors: Matthias Studer, University of Geneva; Emilie Zuercher, Julien Dupraz, Isabelle Peytremann-Bridevaux, University of

Longitudinal studies involving Sequence Analysis (SA) often have the aim to investigate the relationship between typical sequences of categorical states and covariates of interest. Such studies usually imply the following steps: (a) cluster trajectories into homogeneous subgroups based on a dissimilarity measure; (b) use this typology as the outcome or an independent variable in a regression model. This last step implicitly ignores the uncertainty underlying the estimation of the typology (related to sample dependence) as soon as the typology is included in the regression. However, this uncertainty should not be ignored most of the time.

We propose a novel statistical procedure to test the robustness of regression results based on SA typologies. The procedure involves the following steps: (1) bootstrapping (random resampling with replacement) a large number of times from the original sample; (2) estimate each time a new typology with the same dissimilarity measure and clustering settings as the original analysis; (3) apply the regression model to estimate the relationships of interest based on each bootstrap replicate of the typology; (4) combine the effect sizes thus obtained in a mixed-effects model. This procedure produces pooled effect sizes, which can be compared to the original estimates to inform on their reliability and robustness. Moreover, it provides an answer to several aspects of data oversimplification that often impede SA research. The added value of this procedure is illustrated through the study of the association between processes of care adhesion and subsequent adverse healthcare events in a cohort of diabetic patients.

TALK 4: Understanding the Pathways Leading to Childlessness in India Using Sequence History Analysis

Presenter: Rojin Sadeghi, University of Geneva

Co-authors: Matthias Studer, Michel Oris, University of Geneva

Birth control policies have shaped India's demographic history since 1951, promoting the image of the ideal two-child family and making it a powerful reproductive norm. The government spread degrading representations of large families throughout the country, symbolizing discord, lack of care, and poverty – both material and intellectual. At the same time, motherhood has continued to be highly socially valued. Since childlessness has never been considered an option in terms of reproductive intentions, its study in India has largely focused on infertility and its association with poverty and low reproductive health conditions.

However, India's fertility rate has declined from 5.91 in 1960 (World Bank, 2018) to 2 in 2021 (NFHS 5, 2021), creating an entirely new context for family and reproductive decisions. In particular, one might expect an increasing complexity of the phenomenon of childlessness, the factors associated with it, and the relational trajectories that lead to it.

In this research, we develop, conceptually and statistically, a life course perspective on the factors leading to maternity or childlessness in India. Using data from the 2019-2021 National Family Health Survey, we examine whether the profile of women who are less likely to have children is still consistent with the factors associated with infertility through a discrete-time survival model. Then, individual life trajectories are introduced into the model as a mediating variable using the Sequence History Analysis approach. Such sequences include age at first sexual relation, age at first cohabitation, and age at first (formal) marriage. The results show that belonging to certain socioeconomic profiles increases the likelihood of becoming a mother. However, relational trajectories have their own effects and influence the effects of socioeconomic factors when they interact with them.

5D INDIVIDUAL PAPERS (MENTAL HEALTH 1)

TALK 1: Secular Trends in Mental Health Problems Among Young People in Norway: A Review and Meta-Analysis

Presenter: Thomas Potrebny, Western Norway University of Applied Sciences

There is a growing concern that the mental health of recent generations of youth is deteriorating, yet the etiology of these secular changes is not fully understood. We aimed to review the evidence on societal changes in trends of mental health problems among young people in Norway. Seven large-scale repeated cross-sectional studies were included in this study, comprising of 35 cross-sectional data collections between 1992 and 2019, with a total sample of 776,606 young people. Our study found a clear increase in mental health problems among young females in Norway over the past few decades, while the trends were less marked for males. The proportion of individuals scoring above the problematic symptom score threshold increased on average by 11.2% (range 2.2% to 21.9%) for females and 5.2% (range -0.9% to 11.1%) for males, based on data from the individual studies. The results from a meta-regression analysis showed that across all surveys, mean symptom scores increased by 17% (95%CI 12 to 21%) among females and 5% (95% CI 1 to 9%) among males from 1992 to 2019. Overall, mental health problems have increased continually since the early 1990s among young people, especially among young females. The cause of these secular changes remains unknown but likely reflect the interplay of several factors at the individual and societal level.

TALK 2: Early Life Stress in Relation with Multimorbidity Risk Across Adulthood: Findings from a British Birth Cohort

Presenter: Ainhoa Ugarteche-Pérez, Inserm - Université de Toulouse

Co-authors: Eloïse Berger, Michelle Kelly-Irving, Cyrille Delpierre, Raphaële Castagné, Inserm - Université de Toulouse; Lucile Capuron, University of Bordeaux

Background: Multimorbidity, known as the co-occurrence of at least two chronic conditions, has become of increasing concern in the current context of ageing populations though, it affects all ages. Early life risk factors of multimorbidity include Adverse Childhood Experiences (ACEs), particularly associated with psychological conditions and weight management. Few studies have considered related mechanisms and mainly focus on old age participants. We are interested in estimating the risk of multimorbidity related to ACEs from early adulthood while adjusting for early life confounders and potential moderators.

Methods: We used data from the 1958 National Child Development Study, a prospective birth cohort study (N=18,558). A multimorbidity measure at 23, 33 and 42 years was constructed as a combination of depression and overweight. Depression was classified using the Malaise Inventory and overweight defined according to sex-specific distributions of BMI. Reports of ACEs (child in care; physical neglect; contact with probation; parental separation; family mental illness; alcohol abuse) were measured prospectively and combined into a 3-level categorical variable. Multinomial logistic regression models adjusting by blocks of potential moderators co-occurring with the outcome were created.

Results: An association between ACEs and multimorbidity risk was found throughout adulthood (for example, at 23y., RRR[95%CI] = 3.80[2.10; 6.88]), though weaker overtime, and was larger than the associated risk to either condition separately. Part of the association was explained by early life confounders and additionally by adult SEP and health behaviors. After full-adjustment, an association remained (RRR[95%CI] at 23y. = 2.00 [1.08; 3.72]). No interaction between ACEs and sex was observed.

Conclusion: Using detailed longitudinal data, our study provides evidence on the link and potential mechanisms between early negative psychosocial exposures and the co-occurrence of mental and physical diseases throughout the life-course. We suggest addressing ACEs in intervention strategies and public policies to go beyond single disease prevention.

TALK 3: German Reunification: Stress and Psychological Well-Being - Results of a Longitudinal Study

Presenter: Hendrik Berth, Technische Universität Dresden

Co-authors: Lisa Irmscher, Technische Universität Dresden; Elmar Brähler, University Medical Center Mainz;

 ${\it Markus Zenger, University of Applied Sciences Magdeburg-Stendal; Yve St\"{o}bel-Richter, University of Applied Science} \\$

Zittau/Görlitz

Background: The transformation of East Germany after reunification in the 1990s was accompanied by serious socio-structural changes for large parts of the population of the former GDR, including an extraordinarily high number of unemployed persons. Research question: How do stress experienced by East Germans during the post-reunification period affect their psychological well-being over time?

Methods: The Saxon Longitudinal Study (www.wiedervereinigung.de/sls) has been investigating the transformation of East Germany from a sociological and psychological perspective since 1987. In the context of the 12th wave (1998) of the study, 10 items were used to record the burdens of transition experienced up to that time. These included the respondent's own unemployment, the unemployment of their parents, and satisfaction with their housing situation or standard of living. Participants were N = 368 East Germans with a mean age of 25.1 years. 54% were female. In addition to the study's own constructs, established questionnaires such as the Hospital Anxiety and Depression Scale (HADS) or the Giessener Beschwerdebogen (GBB-24) were used to measure psychological well-being.

Results: Most of the participants reported pronounced stress in the post-reunification period. More than 50% were affected by unemployment. 70% of respondents had to change their career plans due to reunification. 36% were afraid of personal difficulties. The more post-reunification stresses were reported, the worse the psychological well-being in all instruments used. This finding is also found for all later surveys in the longitudinal study. The psychological distress caused by the turnaround declines over time.

Discussion: The economic, social and political changes in East Germany in the 1990s led to a significant reduction in psychological well-being among East Germans who had negative experiences such as unemployment during this period. Even more than 30 years after reunification, this can be demonstrated empirically using data from the Saxon Longitudinal Study.

TALK 4: Youth's Eco-Anxiety is Related to Happiness but Not to Life Satisfaction: The Moderating Role of Proximity to Extreme Weather Events

Presenter: Roger Fernandez-Urbano, University of Luxembourg Co-authors: Robin Samuel, Hamid Bulut, University of Luxembourg

Beyond the material consequences, climate change can also produce non-material effects, which politicians have mainly overlooked, such as emotional concerns and preference shifts among citizens. One of the non-material effects that has recently been popularized in the media and academia is eco-anxiety, which seems to particularly affect young people in developed countries and refers to the anxiety people face from constantly being surrounded by the threatening problems associated with climate change. This article investigates how eco-anxiety is related with subjective well-being among youth using data from Luxembourg. It also analyses how this relationship is moderated by proximity to extreme weather events. Luxembourg is a relevant setting because it is the country with the highest GDP per capita in the world and one of the happiest, and like other European countries, it experienced a severe flooding in the summer of 2021. With a sample of 3.500 observations, our results show that while there is a strong positive relationship between eco-anxiety and affective subjective well-being (happiness) beyond individual characteristics, this relationship appears to be non-existent when we use an evaluative measure of subjective well-being (life satisfaction). Furthermore, our results indicate that the association between eco-anxiety and happiness is not sensitive to the flooding in their country, unless individuals are directly exposed to it, in which case the association between eco-anxiety and happiness becomes negative. The article stipulates several potential explanations for these results and presents avenues for future research. Overall, this evidence can also help to understand why citizens are less willing to take action against climate change in the short-term.

TALK 5: Changes in Depression Symptoms for Young People in Aotearoa, New Zealand

Presenter: Ben Fletcher, University of Auckland

Co-authors: Caroline Walker, Jane Cha, Denise Neumann, Sarah-Jane Paine, Annie Park, John Fenaughty, Amy L. Bird,

Karen E. Waldie, University of Auckland

Depression is a common mental health condition among young people that negatively impacts well-being and development. While the incidence of depression is traditionally associated with adolescence and adulthood, some research suggests it may also be prevalent in childhood. Understanding predictors of young people's experiences of self-reported depression symptoms is crucial for developing effective interventions and support systems. The current study will utilise longitudinal data from the Growing Up in New Zealand study to examine changes in depression symptoms among young people aged 8 to 12. Depression symptoms were measured using the Centre for Epidemiologic Studies Depression Scale for Children (CES-DC-10). Preliminary analysis suggests that over half of the young people in the cohort experienced an increase in depression symptoms. Higher depression symptoms at eight years old predicted greater depression symptoms at 12. Multivariate analysis indicated that the strongest predictors of higher depression symptoms are being bullied or identifying as transgender/non-binary, and these findings are considered in relation to the Minority Stress hypothesis, as stronger relationships with peers or parents may protect against depression symptoms. Given the increasing prevalence of depression among young people, there is a need for effective prevention and intervention strategies. By identifying factors contributing to depression symptoms, this study provides insights for intervention and support. These findings highlight the importance of addressing bullying, supporting transgender and non-

binary youth and the need for positive social relationships to promote mental health. Additionally, the study underscores the significance of examining mental health outcomes for children, as depression may impact individuals at a younger age than previously believed. The Growing Up in New Zealand study provides a unique opportunity to gain insight into young people's development and mental health over time.

5E INDIVIDUAL PAPERS (PARENTING)

TALK 1: The Study Draws on the Family Investment Model (FIM) and the Family Stress Model (FSM) to Analyse the Consequences of Parental SES for Child's Mathematic Development in Adolescence

Presenter: Mengxuan Li, Trinity College Dublin

Co-author: Yekaterina Chzhen, Trinity College Dublin

This paper examines the relationship between household socioeconomic status (SES) and children's mathematics test scores at age 17 for a nationally representative United Kingdom birth cohort —the Millennium Cohort Study. A large body of evidence has documented a positive association between household SES and children's academic performance, but there is less research on mathematical achievement specifically, especially in a longitudinal perspective. The present study uses longitudinal data for children between the ages of 7 and 17 to disentangle the contributions of demographic and socioeconomic family characteristics, children's early numerical ability, and parental cognitive ability on children's mathematics achievement in adolescence. The results indicate that a large part of the disadvantages in mathematic achievement by lower SES background during secondary school could be attributed to achievement gaps that already existed before school. Parental educational qualification and occupational class differentials are strong mediators of inequalities in offspring's mathematic scores at age 17, however, after controlling for the child's past scores, parental education and occupation are not matter anymore. While household income is still a powerful driver of change in mathematic skills between ages 7 to 17. Children living in income-poor households are associated with a 1.04 lower predicted score compared to those who were not, while a 1 SD difference in financial strain is associated with 0.19 SD lower scores (p < 0.001). We also found child cogitative skills is highly associated with their later mathematic test scores, 1-SD change in child cognitive ability at age 14 brings 0.25 SD differences at mathematic scores at age 17 (p < 0.001). There are strong gradients in parental cognitive scores according to parental education, social class, and income. Parents with higher cognitive skills could directly influence their child's mathematic achievement at 17 but also indirectly via the study child's own cognitive skills.

TALK 2: Higher, Further, Faster? Investigating the Relative Effect of Parents' Socioeconomic Position on a Person's Subjective Well-Being

Presenter: Frederike Esche, University of Hamburg

Research on social mobility mainly has focused either on describing the extent of social mobility or on identifying its underlying mechanism. Up to now, however, the question on how social (im)mobility is perceived by the individual has not been addressed. This surprises as younger generations face less stable and more precarious employment trajectories and are less upwardly mobile than their parents, who – as the boomer generation – benefitted from economic growth and upward mobility. Consequently, topics such as "increasing inequality" and "shrinking middle class" etc. have received considerable attention in the current public and political debate and often have been discussed in relation to increasing economic anxieties and dissatisfaction.

The family of origin is assumed to have an absolute and relative effect on a person's subjective well-being (SWB). Drawing on social comparison theory, parents may serve as a reference for a person's self-evaluation. From this perspective, the parental socioeconomic position is assumed to have a relative effect on a person's SWB: Upward mobility is assumed to produce positive feelings, whereas downward mobility is assumed to produce negative feelings.

Using the longitudinal data of the SOEP, this paper aims to investigate the relative effect on a person's SWB in more detail. To measure the relative effect, information on a persons' current socioeconomic position in the main employment phase are linked to the retrospective data of the parental socioeconomic position at the time of moving out. Different indicators are used to capture the social position, such as income, occupational status, employment status, cumulative employment experience. Apart from analysing the general relative effect on a person's SWB, this study also examines whether the effect differs with the own social position. In doing so, this paper contributes to the understanding on how intergenerational social (im)mobility is subjectively perceived by the individuals.

TALK 3: (In)Stability and Fertility: Re-Theorizing (Un)Certainty Variability and its Relation to Fertility Using Data on Births from the United States, 2003-2020

Presenter: Kelsey Wright, University of Helsinki

Co-authors: Mikko Myrskylä, Max Planck Institute for Demographic Research

Recent work on fertility has focused on the concepts of uncertainty and decision-making, particularly in the context of large world-historic events like the 2008 recession and the 2019 COVID-pandemic (Heuveline, 2007; Johnson- Hanks, 2005; Matysiak, Sobotka, & Vignoli, 2021; Nobles et al., 2015). Research on shocks from economic crises, conflict, and natural disasters suggests that, although highly variable, there may be temporary or lagged fertility adjustments following periods of uncertainty. Some of these studies suggest that, in response to crises, adults adjust when they have children, while others suggest that adults adjust how many children they have. Few of these studies examine how uncertainty, as a stable characteristic of the modern world, routinely affects fertility outcomes in an ongoing and sustained way (see Mills & Blossfeld, 2013). Here, we build on this work to

better understand how the duration and volatility of economic uncertainty, as represented by running average of the standard deviations of unemployment rates, are related to subsequent county level-age-specific fertility. Because modernity is characterized by continuous uncertainty, rather than using the traditional economic "shock" approach, we aim to operationalize. routine uncertainty by using the variability of unemployment rates as a measure of the stability of everyday life. This work is particularly important because some work (e.g., Trinitapoli and Yeatman 2017) suggests that some people engage in childbearing to reduce feelings of uncertainty (compared to much of the shock literature that finds short term decreases and returns to "normal" levels typically). Here we calculate the variability in unemployment over different durations prior to conception using U.S. birth registration and Local Area Unemployment Statistics (as measured by the standard deviation in unemployment over t months prior to conception, where t=3, 6, 9, 12, 18, and 24) to estimate whether and how variation in unemployment rates affects fertility.

TALK 4: The Contributions of Parenting to School Grades

Presenter: Bastian Mönkediek,

Co-author: Martin Diewald, Bielefeld University

Parenting styles and parental involvement in school are often highlighted as important transmission belts through which unequal parental homes influence children's academic performance, passing on advantages and disadvantages. However, particularly genetically informed studies have cast doubt on the causality of these associations. We examine several pathways of how gene environment correlation and interaction may contribute to an only spurious correlation between different parenting dimensions and school grades. While associations were driven in most cases by environmental confounding, we found evidence that parenting behaviors matter for child's German grades but not math grades. Overall, our results highlight the need to differentiate between school subjects, dimensions of parenting behaviors, and reporting perspective when studying the link between parenting behaviors and child's school performance. For both parenting and school grades, the use of composite measures will most likely mask important differences.

5F INDIVIDUAL PAPERS (DRUG USE AND ADDICTION)

TALK 1: Examining Socio-Cultural Explanations for Social Gradient in Smoking: A Longitudinal Path Analysis Using Growing Up in Ireland

Presenter: Olivia McEvoy, Trinity College Dublin Co-author: Richard Layte, Trinity College Dublin

Absolute prevalence of tobacco smoking among adolescents has fallen but inequalities by socio-economic position (SEP) persist. Current explanations focus on individualistic theories based on differentials in knowledge and psychology. We argue that a more effective account would consider structural explanations, based on social networks and group identity. We compare each, theoretically and empirically, using data on a nationally representative cohort of 8,568 young people from Ireland age 9 to 17/8.

Descriptive analyses showed that a higher proportion of disadvantaged adolescents were smokers. Risk of smoking initiation peaks at 16 to 17yrs and age of initiation differs significantly across SEP. Our path analysis results indicated that parental smoking and values of social resistance are the most important mediators of the relationship between childhood SEP and smoking, the latter accounting for 70% of the SEP differential. Our results favoured structural explanations for inequalities in adolescent smoking over explanations based on individual psychology.

TALK 2: The Association Between Parental and Child Alcohol Consumption: Trends from Growing Up in Ireland

Presenter: Eoin McNamara, Department of Children, Equality, Disability, Integration and Youth, Ireland

Adolescent alcohol consumption is a substantial health risk, and drinking patterns in youth are strongly predictive of adult drinking behaviour. Identifying and targeting risk factors at an early stage is vital. Whilst there exists strong evidence of an association between parental and child alcohol consumption behaviour, the causal nature of the relationship remains unclear. This study aimed to analyse longitudinal trends in drinking behaviour in a sample of Irish adolescents, exploring associations with parental drinking patterns and other potential risk factors. Longitudinal data were gathered from three waves of the Growing Up in Ireland study, when participants were age 13, 17/18 and 20 years old. Information on alcohol consumption and risky drinking behaviour, along with a range of sociodemographic and well-being indicators, was gathered from both the young participants and their parents. Longitudinal trends and inter-generational associations were analysed. At age 13, 16% of young people had drunk alcohol – gender and social class differences were observed. By age 17/18, almost all (89%) young people had drunk alcohol, while 5% were classed as high or very high-risk drinkers. Notably, drinking habits at 13 predicted drinking habits at 17/18, those who drank at 13 were more likely to drink often and to excess at 17/18. At age 20, the number of high risk or very high-risk drinkers had risen to 11%. This figure increased to 17% if they had had a drink by age 13, and 41% if their drinking habits were deemed risky or worse at age 17. The interaction between adolescent and parental alcohol consumption throughout adolescence and early adulthood is explored.

TALK 3: Patterns and Determinants of Perinatal Smoking Behavior: The Role of Antenatal Care

Presenter: Zsuzsanna Veroszta, Hungarian Demographic Research Institute

Co-authors: Julianna Boros, Hungarian Demographic Research Institute; Ágoston Horváth, Corvinus University of Budapest Objective: Smoking during pregnancy poses significant risks to both the mother and the unborn child, including miscarriages, low birth weight, increased perinatal mortality, and birth defects. This study aims to investigate the prevalence of perinatal maternal smoking in Hungary, identify the characteristics of mothers who quit smoking during pregnancy, and explore the potential supportive role of early antenatal care in smoking cessation.

Methods: Data was obtained from the first two – prenatal and 6-month's old – waves of the Cohort18 – Growing Up In Hungary Birth Cohort Study (n = 8,331). Analyses were based on weighted longitudinal database of mothers. After analysing the distribution of mothers according to their perinatal smoking patterns, a subgroup of ever-smoking pregnant women was selected, among those average marginal effects for logistic regressions were calculated to determine the predictors of smoking cessation.

Results: The study found that 30.4% of mothers smoked daily three months before pregnancy. The prevalence of smoking decreased during pregnancy (17.8%/12.8%) but increased again after childbirth (19.6%). The odds of perinatal smoking cessation varied according to various background characteristics. Smoking cessation was less prevalent among mothers who were low educated, started smoking at an early age, were exposed to second-hand smoke, were expecting their second or third child, belonged to the Roma ethnic group, had an unfavorable economic background, and were delayed in accessing antenatal care provided by health visitors.

Conclusions: Since early access to health visitors' care has been shown to be effective in perinatal smoking cessation, improving the antenatal care system in this respect may be justified. Key words: smoking during pregnancy, smoking cessation, antenatal care

TALK 4: Longitudinal Outcomes of Children Exposed to Opioids In Pregnancy

Presenter: Louise Marryat, University of Dundee

Co-authors: Petra Rauchhaus, University of Dundee; John Frank, James Boardman, University of Edinburgh; Anne Whittaker, University of Stirling

Opioid use has increased across the world, with particular increases for women. Linked with this, use of opioids among women of child-bearing age has also increased. Stigma for women who use drugs is high, particularly if they have children, and mothers who use drugs have higher risk of complex needs, including co-occurring mental health conditions, and experiencing intimate partner violence. Despite this, women who use opioids in pregnancy, and their children, have been largely neglected in research, primarily due to the challenges of traditional longitudinal follow-up. This study uses linked administrative data to identify a cohort of 6,508 children in Scotland who were exposed to opioids in pregnancy (either through illicit substance use or prescription methadone/buprenorphine) in 2007-2019, and link to longitudinal childhood health data. A control group who are demographically similar but with no opioid exposure were selected at a 3:1 ratio. Birth and neonatal outcomes were initially examined using descriptive statistics and regression analyses. Cohort mothers were more likely to have co-morbidities in pregnancy, whilst infants were more likely to be born early (17% cohort preterm vs. 5.8% demographic controls), weigh less at birth (cohort an average of 500g less), have a below normal APGAR score (3% vs. 1.5%), receive care in the neonatal unit (and stay for longer) (37.4% vs. 7.5%), and be discharged out with their mother's care (8.1% vs. 0.2%). Regression results demonstrate that these differences between children exposed and unexposed to opioids are maintained, even when confounding factors, such as alcohol use, socio-economic factors and health factors are controlled for. This presentation will discuss the challenges around creating this complex cohort, as well as presenting these early results in detail, and exploring the next stage of the research which follows up child development to age five.

TALK 5: Tobacco and ENDS Policies and Youth ENDS Initiation in the U.S.: Comprehensive Vaping Bans Are Associated with Lower Odds of Initiation as Adolescents Age

Presenter: Brian Kelly, Purdue University

Co-authors: Mike Vuolo, Maria M Orsini, The Ohio State University; Jeremy Staff, Jennifer L. Maggs, Pennsylvania State University

Background: E-cigarette use has grown considerably over the past decade, with notable increases among adolescents and young adults. Concerns remain that adolescents initiate into nicotine use through e-cigarettes and opportunities for prevention through policy intervention are not entirely understood. We aim to develop a fuller understanding of how state policy contexts for tobacco and e-cigarettes in the United States have shaped initiation into e-cigarette use among youth as they age into early adulthood.

Methods: Intergenerational, longitudinal data from the US Population Assessment of Tobacco and Health study was merged with a state-year database on tobacco and ENDS policies from the Americans for Nonsmokers' Rights Foundation. Multivariable discrete-time event history models of ENDS initiation were estimated based on 20,013 youth ages 13 to 22 assessed over 6 waves from 2013 to 2019 (N=53,979 observations). To better understand the effect of ENDS policy on ENDS initiation within a sociodevelopmental context, our event history analyses focused on the effect of state-level vaping bans on the probability of initiating vaping among youth who reached a given age without having previously vaped.

Results: The odds of ENDS initiation were 19% lower when youth resided in states with comprehensive (i.e., 100% vape-free workplaces, restaurants, bars) vaping bans (OR=.81; 95% CI=[.68,.98]), even after controlling for state tobacco policies as well as youth's cigarette smoking, and socio-demographic background.

Conclusions: State-level vaping bans are associated with reduced odds of initiation into ENDS use from early adolescence into the earliest years of adulthood. Vaping bans may be particularly effective in inhibiting initiation as both restrict the locations young people may vape (reducing accessibility to ENDS) and also establish social environments without vaping (limiting normalization of vaping among young people). However, currently only 17 U.S. states have implemented comprehensive indoor vaping bans mandating that workplaces, bars, and restaurants are 100% vape-free.

6A SYMPOSIUM

European Caregiving in Mid-and Later-Life: Taking a Lifecourse Perspective

Convenor: Anne McMunn

Increased longevity has not been accompanied by an increasing number of years spent disability free. This morbidity expansion has led to an increased need for care of older people. While European countries vary dramatically in how they have met this rising demand, all rely to a certain extent on informal care, provided mainly by family members. Caregiving may limit access to financial and social resources, and lead to poor health. There may be inequalities in who provides care and in the impact of caring by gender, socioeconomic resources, and country context. There remain important gaps in our knowledge of informal care in Europe. This symposium will report findings from a European consortium project funded through the Joint Programming Initiative More Years, Better Lives Programme investigating who becomes an informal carer, and the longer-term consequences of caring in later life, as well as inequalities in these associations from a life course perspective. Papers in this symposium will use data from the Survey of Health and Retirement in Europe (SHARE) and the English Longitudinal Study of Ageing (ELSA) and will include a focus on gender and socioeconomic inequalities, as well as differences by care characteristics.

TALK 1: Country Differences in Informal Care Provision: A Care Regime Typology for Europe

Presenter: Maike van Damme, Pompeu Fabra University

Co-author: Jeroen Spijker, Center for Demographic Studies (CED)

In this paper, we generate a clustering of 23 SHARE countries, Norway, and the UK with respect to care regimes, based on indicators measured around 2008/2009. Alongside Verbakel (2018) and Ariaans et al. (2021), we build upon the seminal study of Saraceno and Keck (2010) on intergenerational support for the young and the old. They introduced the three-fold conceptualization of familialism-by-default, supported familialism, and de-familialisation, which is based on the extent of support through care in kind as well as financial support for caregiving. We formulate expectations about the clustering of countries with respect to their family responsibilities and dependencies based on the literature. We then explore to what extent this expectation holds by performing hierarchical and partitioning repeated k-means cluster analysis. We base the clustering on indicators of 'care in kind' and financial support for formal institutions, as well as indicators for informal institutions (norms and preferences), both for the young and for the old. As a validity check, we see to what extent our care regime typology is related to informal caregiving in the countries of our interest, as well as other related variables that are associated with formal and informal support, such as: the need for care, a country's economic prosperity, flexibility in work adjustment, potential to outsource care (via money and time), and the public/private mix in health care spending. We find four clusters: defamilialized, corporatist-market, supported familialism, and familialism-by-default.

TALK 2: The Impact of Providing Care in Mid-Life on Employment Transitions in Europe

Presenter: Jeroen Spijker, Center for Demographic Studies (CED)

Co-authors: Maike van Damme, Pompeu Fabra University; Christian Deindl, TU Dortmund University; Baowen Xue, Giorgo Di Gessa, University College London

In this paper, we examine to what extent informal caregiving reduces one's possibilities to work. We compare care/work regimes to see if we can relate contextual differences in labour market transitions by informal caregiving patterns amongst the mid-life age group (50-64 years). Using SHARE and ELSA from 2004-2017, we analyse labour market attachment changes according to informal care intensities applying propensity score matching and difference-in-difference techniques. Our contribution to the literature is threefold: (1) First, we examine the consequences for care provided inside the household, as well as non-intensive and intensive care provided outside the household. We create a multivalued treatment of informal care, covering three types of treatment and two 'control' groups: no caregiving (first control group); daily care inside the household (treatment 1); daily care outside the household (treatment 2); weekly or less often care outside the household (treatment 3); already observed as carer in the previous wave (second control group); (2) Second, we perform a 'competing risk analyses' by not only looking at exit out of the labour market, but also at reduction in working hours or retirement, as possible labour market changes compared to continuing to work; (3) Finally, we split analyses by gender and care regime and compare to what extent men and women and different care/work regimes are affected differently when persons become a carer during the observed panel period. Preliminary results indicate that transitioning into an informal caregiving role, particularly intensive caregiving, has an effect on labour market transitions. Upon analyzing the entire sample, we observe significant Average Treatment Effects: non-intensive care outside the household is associated with reduced working hours, while both intensive caregiving inside and outside the household is linked to leaving the labour market.

TALK 3: The Mental and Physical Health Effects of Providing Sandwich Care in the UK: A Longitudinal, Propensity Score Analysis in the UK Household Longitudinal Study

Presenter: Anne McMunn, University College London

Co-authors: Baowen Xue, Giorgio Di Gessa, Rebecca Lacey, University College London

This study investigates the impact on physical and mental health of taking up adult care amongst parents of children under age 16, as well as whether these associations vary by gender of sandwich carer or caregiving intensity. We use ten waves of the UK Household Longitudinal Study, a large, nationally representative panel study in the United Kingdom. Data were collected annually between 2009-2020. Mental health was measured using the 12-item General Health Questionnaire (GHQ-12) and the mental health component of the 12-item Short Form Survey (SF-12 MCS) while physical health was measured using the SF-12 physical component (PCS), all as continuous measures. We use propensity score matching to match each caregiver with one non-caregiver with similar characteristics and then employ linear piecewise growth curve modelling to model the trajectories in physical and mental health before and after becoming a caregiver. We find that uptake of adult care is associated with a deterioration in mental health for mothers on both mental health indicators. This was a dose-response association with levels of distress increasing with increasing number of weekly care hours. For mothers, physical health worsened with uptake of adult care, but only for those caring 10+ house/week. For fathers symptoms of psychological distress on the GHQ increased with uptake of adult care, but only for those caring for 10+ hours/week. Physical health of fathers declined in the lead up to caregiving as well as with the uptake of care, particularly for those caring 10+ hours/week. There was no association between care and the SF-12 MCS for fathers. Targeted support is required for the portion of parents who are also providing adult care for at least ten hours per week.

TALK 4: Employment and Family Histories and Informal Caregiving in Later Life in Europe

Presenter: Christian Deindl, TU Dortmund University

Co-authors: Giorgio Di Gessa, Rebecca Lacey, Baowen Xue, Anne McMunn, University College London; Morten Wahrendorf, University of Duesseldorf; Maike van Damme, Pompeu Fabra University, Jeroen Spijker, Center for Demographic Studies (CED) Informal care is time demanding and can take a heavy toll on other obligations. Therefore, people with time restraints due to employment and family responsibilities might be less inclined to take over care tasks. To analyse the impact of employment and family conditions on care a life course approach is essential to account for employment and family conditions prior to the care task. The impact of gender on care tasks is also important, especially before the backdrop of employment histories that are distinctively different for men and women, especially for older cohorts. Cultural differences between countries do not only matter for care but also for employment and family histories and should also be considered. SHARE and ELSA both conducted life history interviews that enable us to analyse the impact of employment and family histories on care. We will employ sequence analysis to determine clusters of previous employment and family life and regress those on the likelihood of care. We expect that work oriented life histories will lead to a lower likelihood to be involved in care task, whereas respondents with a more family-oriented life course will be more likely to be involved with care. To account for gender differences all analysis will be stratified by gender.

TALK 5: Determinants of Informal Care Trajectories in Europe

Presenter: Giorgio Di Gessa, University College London

Co-authors: Christian Deindl, TU Dortmund University; Morten Wahrendorf, University of Duesseldorf

This study aims to examine longitudinal patterns of informal care provision among older people in Europe, and how socioeconomic, demographic, and health characteristics of older adults relate to these patterns (including needs and enabling factors). Using up to six waves of ELSA and five of SHARE, we aim to conduct latent trajectory analysis to cluster people's diverse trajectories into a finite number of groups. Intensity of informal care provision will also be considered when identifying longitudinal trajectories. We anticipate to find four to five (intensity) trajectories (including those who never provide informal care, those who provide sporadic informal care, those with increasing or decreasing commitment to care provision, and those who care throughout). Gender, age, health, income, living arrangements and family compositions are likely to relate to long-term trajectories of informal care.

TALK 6: How Are Caregiving Location and Type of Care Associated with the Caregiver's Mental Health?

Presenter: Valerie Schaps, University of Duesseldorf

Co-author: Morten Wahrendorf, University of Duesseldorf

Various studies across Europe investigate the association between providing informal care and caregivers' health outcomes. Findings of these studies, though, are mixed and point to both negative and positive associations. This may partly be due to different measures of informal caregiving in the respective studies, failing to distinguish and assess important aspects of the activity that are relevant for health. Examples are the location of care (inside or outside the household), the type of care (personal care, practical household help, or help with paperwork) and intensity of care (daily, weekly, monthly, less than monthly). This study tries to close this gap by analyzing links between informal caregiving and mental health for men and women across Europe, and thereby, consider information on location, type as well as intensity of informal care. Poisson regression models, as an alternative to logistic regression, which is easier to interpret, were calculated to test these associations between depressive symptoms and certain characteristics of the caregiving situation. Findings will be based on SHARE, allowing to investigate crosssectional and longitudinal associations between caregiving and depressive symptoms (as indicator of poor mental health). Preliminary findings suggest that informal caregiving is not always associated with persistent decline of the caregivers' mental health but rather the location, type and intensity of informal care are of great importance. People providing personal care (e.g. bathing, dressing, and feeding) and high intensive care on a daily basis are most likely to report increased depressive symptoms, especially when care is provided inside the household. Moreover, the descriptive results highlight that the prevalence of taking on a caregiving role and the location, type and intensity of that involvement differs by age, wealth, education and in particular gender of the caregiving person with women for example providing more personal care than men do.

6B SYMPOSIUM

Making or Breaking the Cycle? Health Inequalities Within and Across Generations

Convenor: Ylva B. Almquist, Stockholm University

Using large-scale, register-based data from the Nordic countries, this symposium provides novel insights into mechanisms underlying the (re)production of health inequalities at different levels. At the macro-level, Gurzo compares two generations to assess how the establishment of the welfare state has mattered for income inequalities in life expectancy. Located at the meso level, the study by Li shows how disadvantages in the family are transmitted from grandparents to parents, and further affect the mental health of the grandchildren. Turning the perspective around, Bishop explores the influences of substance misuse among adult children on their parents' mental health. At the individual level, Jackisch investigates how childhood adversity contributes to health inequalities through increased risks of disease and lower chances of survival after disease. Moreover, the study by Bornscheuer examines processes of vulnerability and resilience after exposure to childhood adversity, while emphasising the importance of a gender perspective. Taken together, these five studies bring forward compelling evidence of the lasting impact of socioeconomic and psychosocial adversities on health. Attendees will leave this symposium with new knowledge that can inform strategies for preventing and intervening against cycles of disadvantages and thereby reducing health inequalities.

TALK 1: One Generation Apart: Individual Income and Life Expectancy in Two Swedish Cohorts Born in 1922-1926 and 1951-1955

Presenter: Klara Gurzo, Stockholm University

Co-authors: Olof Östergren, Johan Rehnberg, Pekka Martikainen, Stockholm University

Long-term trends in period life expectancies commonly show persisting or even increasing health inequalities in Sweden. These trends can be difficult to interpret since they are based on mortality risks from birth cohorts growing up in different time periods. Inequalities in cohort life expectancy provide an important supplementary perspective on social inequalities in health, comparing instead individuals that grew up under similar social and institutional arrangements. The aim of this study is to describe how income inequalities in life expectancy have changed between two generations in Sweden, one of which experienced the established welfare state first as adults while the other experienced it from birth. Data on individuals born in Sweden during 1922-1926 (G0) and 1951-1955 (G1) were collected from total population registries (individual disposable income: 1970 and 1999; mortality: 1972-1987 and 2001-2016, respectively). Gender-specific temporary cohort life expectancies (age 50-62) according to relative and absolute income were calculated by using restricted mean survival time. Results showed that, among men, income inequalities in health characterized both cohorts. Life expectancy gains from G0 to G1 were found only from the 20th income percentile while life expectancy remained the same in the lower part of the income distribution. The gain in life expectancy was constant above the 30th percentile. Among women, income inequalities in life expectancy appeared only in G1. Gain in life expectancy emerged around the 20th percentile and was constant above the 25th percentile. The patterns remained the same for relative and absolute income as well. In sum, although temporary life expectancy between age 50 and 62 increased on average between two Swedish generations born around 1924 and 1953, low income men could not benefit from this change. The temporary life expectancy of women showed an association with individual income only after the expansion of women's labour force participation.

TALK 2: Grandparental Disadvantages and Grandchild Mental Health: Exploring Clusters, Pathways, and Outcomes Across Multiple Generations

Presenter: Baojing Li, Stockholm University

Co-authors: Ylva B. Almquist, Can Liu, Lisa Berg, Stockholm University

There is a lack of research investigating to what extent mental health is informed by the transmission of multiple disadvantages across previous generations. This study aims to investigate how family socioeconomic and psychosocial disadvantages (SPD) cluster and accumulate over grandparental and parental generations, and how this might be associated with grandchild psychiatric disorders in Sweden. We studied three generations of Swedes, centred around 11,327 individuals born in 1953 (parental generation), their 22,654 parents (grandparental generation), and 24,900 children (grandchild generation). Using latent class analysis with the Bolck-Croon-Hagenaars (BCH) corrections, we first grouped SPD into latent classes among the grandparental and parental generations at the family level, separately, and second, we examined the associations between the identified latent classes and grandchild psychiatric disorders. Third, latent transition analysis with BCH corrections were used to estimate the probability of transitioning from the grandparental classes to the parental classes, as well as the probability of grandchild psychiatric disorders for each unique transition pattern. The analyses revealed five distinct latent classes for the grandparental and parental generations, respectively. The highest probability of grandchild psychiatric disorders was found for those originating from the grandparental class with high-level overcrowding and the parental class with high-level SPD, respectively. The grandparental classes with medium- and high-level SPD were more likely to transition to the parental class with high-level SPD. The transition pattern reflecting high-level SPD across grandparental and parental generations was found to predict a particularly high probability of psychiatric disorders among grandchildren. We conclude that clusters of high-level SPD are repeated across generations, which in turn is linked to a particularly high likelihood of psychiatric disorders among descendants.

TALK 3: Offspring Hospitalization for Substance Misuse and Changes in Parental Mental Health: A Finnish Register-Based Study

Presenter: Lauren Bishop, University of Helsinki

Co-authors: Ylva B. Almquist, Stockholm University; Joonas Pitkänen, Pekka Martikainen, University of Helsinki

Prior research indicates that parental substance misuse increases offspring's risk of psychiatric disorders. Though the association is likely bidirectional, the effects of an offspring's substance misuse on parental mental health are comparatively understudied. This study therefore examined changes in parents' mental health following an offspring's alcohol- or narcotics-attributable hospitalization. We identified Finnish emerging adults, born 1979–1988, with a first hospitalization for substance misuse between ages 18-29 (N=12,851). Their biological mothers (N=12,282) and/or fathers (N=10,766) were followed for the two years before and after the hospitalization. Psychotropic medication use was used as a proxy for parental mental health and was measured in 90-day periods during follow-up. Changes in mental health following the offspring's hospitalization were assessed using generalized estimating equations. We examined differences in medication trajectories by parental sex and educational attainment, and by offspring hospitalization for alcohol or narcotics. The results showed increased parental psychotropic medication use following the offspring's hospitalization. Among mothers, medication use generally peaked during the 90-day period following the hospitalization for both substances and remained elevated until the end of follow-up. Effect modification by educational attainment showed similar results. Fathers' medication use increased more gradually, with peak use occurring toward the end of follow-up, though clear patterns centred around the hospitalization were less evident. Among mothers, medication use also steadily increased in the year preceding hospitalization. We conclude that though an offspring's hospitalization for substance misuse may constitute a stressful life event for parents, these results also show anticipatory changes in parental mental health before the hospitalization, thereby reflecting the progression of substance misuse and its potential effects on others' mental health even before a severe event occurs. The parent-offspring relationship exemplifies linked lives, and the resulting burden of ill-health from substance misuse within this dyad has important implications for prevention and treatment.

TALK 4: Childhood Adversity is Associated with Hospitalisations and Survival Following External Causes and Non-Communicable Diseases: A 46-Year Follow-Up of a Stockholm Birth Cohort

Presenter: Josephine Jackisch, University of Fribourg Co-author: Ylva B Almquist, Stockholm University

Childhood adversity indicated by involvement with child welfare services (ICWS) is associated with increased risks of disease and injuries in young adulthood. It is yet unknown whether such risks are limited to external causes and mental and behavioural disorders or whether they extend beyond early adulthood and to non-communicable diseases (NCDs) with later onset. Moreover, it has not been explored whether ICWS associates with decreased survival prospects following hospitalisation. Based on prospective data for a 1953 Stockholm birth cohort (n=14 134), ICWS was operationalised distinguishing two levels in administrative child welfare records (ages 0-19; 'investigated' and 'placed' in out-of-home care (OHC)). Hospitalisations and all-cause mortality (ages 20-66) were derived from national registers. Hospitalisation records were categorised into external causes and NCDs, and nine subcategories. Negative binomial regression models were used to estimate differences in hospitalisation risks between those with and without experiences of ICWS and Cox survival models to estimate mortality after hospitalisation. The results showed that placement in OHC was associated with higher risks of hospitalisation due to external causes and NCDs and all investigated subcategories except cancers. Risks were generally also elevated among those investigated but not placed. ICWS was further linked to higher mortality risks following hospitalisation. These findings suggest that differential risk of morbidity and differential survival may explain inequalities in mortality following childhood adversity. We conclude that the healthcare sector might play an important role in preventing and mitigating the elevated risks of externally caused morbidity, disease and premature mortality observed among those with a history of ICWS.

TALK 5: Adulthood Trajectories of Resilience and Vulnerability: Exploring Sex/Gender Differences in Disadvantage After Childhood Adversity

Presenter: Lisa Bornscheuer, Stockholm University

Co-author: Evelina Landstedt, Karl Gauffin, Ylva B. Almquist, Stockholm University

Resilience and vulnerability are complex, multi-dimensional processes that unfold after adversity. Understanding these processes requires a nuanced and multi-layered approach, especially when describing putative differences in resilience and vulnerability between men and women. This study used register data from a 1953 Swedish birth cohort to model resilience and vulnerability as absence and presence of disadvantage across socioeconomic and health dimensions in adults with experience of childhood adversity, by means of group-based multi-trajectory modelling. We find that men are more likely to follow trajectories characterised by complex disadvantage, while there is a slight tendency for women to be overrepresented in the trajectory group characterised by disabling health disadvantage. This study shows how prospectively collected routine data can be used to empirically approach the concepts of resilience and vulnerability, and how a longitudinal engagement with disadvantage across multiple life domains can provide a rich description of men's and women's experiences in this context. Future studies can further deepen our understanding of sex/gender differences by investigating mechanisms translating into resilient or vulnerable trajectories.

6C INDIVIDUAL PAPERS (DATA COLLECTION 1)

TALK 1: Tips for Harmonizing Family Variables for Longitudinal International Datasets

Presenter: Nina Stoddard-Bennett, Brigham Young University

Co-authors: Shana Pribesh, Old Dominion University; Jane Smith Carson, Mikaela Dufur, Jonathan Jarvis, Brigham Young

University

The purpose of this paper is to present options for harmonization of family dynamics variables across a series of datasets for industrialized, high-income, and developed nations. The primary objective of harmonization is to establish a standardized set of variables for studying families across diverse populations and time periods. We use data from the Growing Up in Australia: Longitudinal Study of Australian Children (LSAC), the UK Millennium Cohort Study (MCS), and the US Early Childhood Longitudinal Study (ECLS-K). We specifically investigate marital and cohabitation patterns to create an eight-category family structure variable in each of the three datasets. This family structure variable captures biological as well as social parents which allows for crossnational comparisons of family structure and formation to provide a more nuanced understanding of family diversity. Additionally, we harmonize questions regarding relationships between parents as well as relationships between parents and children to construct a measurement of family social capital that is comparable in all three datasets. The multiple dimensions of family relationship quality can be used to understand the closeness and quality of family relationships. Since these measurements are harmonized across all three datasets, similarities and differences in family structure and family social capital can be analysed. Harmonization presents a resource for future researchers to investigate a variety of questions regarding family creation, dissolution, transformation, and dimensions to relationships that may impact the child's quality of life and access to resources or opportunities. The results also provide important insights for policymakers and practitioners concerned with promoting family well-being and supporting families in diverse circumstances.

TALK 2: Comparison Between Continuous-Time and Discrete-Time Event History Models

Presenter: Gwendolin Blossfeld, University of Bamberg Co-author: Hans-Peter Blossfeld, University of Bamberg

Empirical scientists have increasingly collected data on the timing of events. This paper focuses on processes in which events can occur - at least in principle - at any point in time and which are recorded with different observation schemes. In retrospective life course research, the smallest unit of time is typically a month and continuous-time event history models are used to analyse this type of data. However, time-continuous processes are also observed with larger observation intervals. Methods for analysing these coarser time observations are referred to as discrete-time event history analysis. Both methods are used in parallel in empirical applications, but it is largely unclear how the results of these different models relate to each other. The aim of this paper is to compare and discuss the statistical concepts and empirical applications of continuous-time and discrete-time event history models and to show how they compare. We estimate transition rate models with different shapes of the duration dependence (Piecewise Constant Exponential model, the Weibull model and the Coale model) and compare continuous-time and discrete-time transition rate models (with different observation interval widths: monthly, yearly, biennially or observations every four years). In these models the transition rate varies as a function of duration (continuous-time models) or with respect to the changing duration measured at the beginning of each observation interval (discrete-time models). This paper demonstrates with a variety of practical examples what it means when the observation intervals of the observed durations become larger in discrete-time applications and discusses the limitations of this method compared to continuous-time models.

TALK 3: Ethnic-Specific Characteristics Associated with Response Patterns from Pre-Birth to 12-Years: Evidence from Growing Up in New Zealand

Presenter: Esther Yao, University of Auckland

Co-author: Denise Neumann, Fiona Langridge, Sarah-Jane Paine, University of Auckland; Seini Taufa, Moana Connect;

Renee Liang, Auckland District Health Board; Te Kani Kingi, Te Whare Wānanga o Awanuiārangi

Longitudinal studies with high retention rates provide important information on how individual and contextual characteristics interplay to influence health and wellbeing trajectories. Maintaining high participation over time can be challenging, and diverse cohorts require particular prioritisation and care. The aim of this study was to examine characteristics associated with response patterns for the main ethnic groupings (Māori [Indigenous Peoples of Aotearoa New Zealand], Pacific, Asian, European) in the Growing Up in New Zealand (GUiNZ) cohort, in order to inform cohort retention, restoration, and broader scientific knowledge and practice. GUiNZ is Aotearoa New Zealand's largest contemporary longitudinal study of child development, with 6,853 children and their families recruited from pregnancy. Using sequence analysis, we identified three clusters of distinct household response patterns from pre-birth to 12-years (six main data collection waves): frequent response, intermittent nonresponse, and frequent non-response. Households with Māori, Pacific, and Asian mothers were significantly more likely than those with European mothers to be in the non-response clusters. Multivariable logistic regression models for each ethnic grouping showed that characteristics such as younger maternal age and lower maternal education were associated with higher likelihood of membership in the non-response clusters across all ethnic groups. However, there were also important nuances by ethnicity. For example, higher household deprivation was associated with non-response in the Asian and European models (but not Māori and Pacific), and neighbourhood deprivation was associated with non-response in the Māori, Pacific, and Asian models (but not European). In addition, poorer self-reported general health was only associated with response patterns in the European model. The results indicate the importance of conducting ethnic-specific analyses when examining longitudinal response patterns, in order to design appropriate and effective retention strategies for cohorts rich in diversity.

TALK 4: Discrete-Time Multistate Modeling for Life Course Analysis

Presenter: Christian Dudel, Max Planck Institute for Demgraphic Research (MPIDR)

Co-authors: Mikko Myrskylä, Angelo Lorenti, Daniel C. Schneider, Max Planck Institute for Demgraphic Research (MPIDR)

Many social processes can be represented by individuals being in, and transitioning between, a finite number of states. Examples include transitions in the labour market, between marital states, and many more. Statistical modelling of such processes can be done using multistate models. Multistate models come in two different variants: discrete-time and continuous-time. While continuous-time multistate models have been extensively described in the literature, there is little guidance on their discretetime counterparts. This is unfortunate since many data sources – regularly spaced longitudinal surveys in particular – naturally lend themselves to modelling in discrete time. We provide new theoretical and practical insights into discrete time multistate models (DTMMs) for panel data. From a theoretical perspective, we establish a set of theoretical estimands which can be studied using DTMMs and which are linked to life course theory and the concept of cumulative (dis)advantage. Moreover, we present novel technical results which counter one of the main criticisms of multistate modelling: multistate models usually rely on the Markov assumption, which implies that the studied process is memoryless. While this assumption likely is false for many potential applications, we show that several quantities can be consistently estimated using DTMMs even if the Markov assumption does not hold. Finally, related to the previous two points, we argue that DTMMs can provide adequate representations of populationlevel quantities, while being less well-suited for individual-level predictions. From a practical perspective, we use data from SHARELIFE to show that DTMMs provide good representations of real-world data, and that finite sample bias is modest. An indepth example is provided using data from the U.S. Health and Retirement Study. Finally, we briefly remark on a novel Stata package and existing R packages for the estimation of DTMMs.

TALK 5: Synthesising Lifecourse Trajectories of Phenotypes Leading to Major Non-Communicable Diseases (NCDs): Opportunities to Identify Optimum Intervention Windows

Presenter: Katie McBain, University of Melbourne

Co-authors: Samuel Kasjan, University of Melbourne; Dorothea Dumuid, Timothy Olds, University of South Australia;

Susan Clifford, Melissa Wake, Murdoch Children's Research Institute

Background: Many NCDs represent the endpoints of life course trajectories across their relevant body systems. Trajectories for single phenotypes underpinning separate NCDs are emerging from life course studies. This scoping review aimed to synthesise trajectories of multiple NCD precursor phenotypes to multiple disease endpoints. This could guide optimal, coordinated timing for measurement in life course studies and interventions aimed at preventing NCDs overall. Methods: PubMed and Medline were searched for trajectories of phenotypes directly leading to major NCDs contributing to global disease burden in adults aged 75+: cardiovascular disease, diabetes, chronic obstructive pulmonary disease, adverse impacts of falls, chronic kidney disease, hearing loss, vision loss, and dementia. We included trajectories with ≥3 timepoints, spanning ≥5 years in childhood and ≥10 years in adulthood. Results: Two authors independently reviewed 2152 abstracts and 232 full texts; 81 then underwent single-author extraction. Most articles spanned relatively short age ranges, requiring synthesis to generate the lifetime visualisations to be shown in this presentation. 48% reported on cardiovascular phenotype trajectories, which collectively span nearly the entire life course (age 5 – 100). 23% reported cognition trajectories, but measurement diversity precluded synthesis. The remaining 29% reported on lung function, plasma glucose, kidney function and musculoskeletal phenotypes. None reported on vision or hearing. Musculoskeletal phenotypes follow a pattern of childhood growth, an early adult peak and subsequent decline. Blood pressure, pulse wave velocity and plasma glucose reach optimal levels in early adulthood and further increase beyond healthy ranges with ageing. Trajectory shapes of lung and kidney function could not be ascertained. Conclusions: Evidence is strongest for trajectories leading to cardiovascular disease, diabetes and adverse impacts of falls, and suggests life stages for each when preventive intervention may be most impactful. Lifecourse trajectories to other important disease outcomes are poorly understood. This impedes decisions regarding which phenotypes to target for interventions and when.

6D

INDIVIDUAL PAPERS (MENTAL HEALTH 2)

TALK 1: The Impact of Family Complexity on Development and Psychological Adjustment in Early Childhood

Presenter: Judit Monostori, Hungarian Demographic Research Institute

Co-authors: Laura Szabó, Krisztina Kopcsó, Hungarian Demographic Research Institute

Numerous studies have addressed the question of how the family structure influences children's developmental and behavioural outcomes. Most of these researchers have focused on the disadvantages that children in single-parent families suffer compared to children in two-parent families. However, two-parent families can also be differentiated by whether the child lives with both biological parents and what the sibling composition is. Taking this into account, we developed a family complexity index that separates full biological families, stepfamilies and single-parent families. Within the stepfamilies, children who live with both biological parents but have step- or half-siblings, and those who only have one biological parent living in the household were distinguished. Early childhood development (measured by the Ages and Stages Questionnaire-3) and emotional and behavioural problems (measured by the Strength and Difficulties Questionnaire) at the age of 3 are the two dependent variables in our study. Our research aim is to examine how the children's outcomes are influenced by the family complexity and by the biological parents' relationship quality, controlled for the main biological, demographic and socioeconomic characteristics of the children and their mothers. Our data come from four waves (t1/prenatal, t2/6 months, t3/18 months, t4/3 years) of the nationally representative Cohort '18 Growing Up in Hungary longitudinal study. During the prenatal wave 8287 women giving birth in 2018-2019 were surveyed with face-to-face and self-completion interviews. The preliminary results confirmed that a conflictual

relationship between the biological parents has a negative effect on both child outcomes in all family types (full biological family; biological child with step- or half-siblings; stepchild; single-mother family). In addition, children in two-parent families including a stepfather were more likely to have a developmental delay, while children in single-parent families had a higher risk of emotional and behavioural problems.

TALK 2: Young Adults' Work-Family Life Courses and Mental Health Trajectories from Adolescence to Young Adulthood: A TRAILS Study

Presenter: Vendula Machu, University of Groningen

Co-authors: Iris Arends, Josué Almansa, Karin Veldman, Ute Bültmann, University of Groningen

Background: Prior studies showed that work-family life courses are associated with mental health in early life and in later life, but little is known about the course of mental health problems in people with different work and family experiences during young adulthood. This study adds a more in-depth understanding of the association between work-family experiences and mental health by exploring the mental health trajectories of people with different work-family life courses during young adulthood. Methods: Work-family life courses covering 10 years, from ages 18 to 28 years, were constructed by applying sequence analysis in a sample of 992 young adults from the TRacking Adolescents' Individual Lives Survey (TRAILS). For each of the identified workfamily life courses, we separately estimated the trajectories of internalising and externalising mental health problems from ages 11 to 29 years using a random intercept model. Next, we explored differences in mental health trajectories across work-family life courses during young adulthood (ages 19 to 29 years). Results: We found small, non-significant differences in mental health trajectories between the six work-family life courses during young adulthood. Post-hoc analysis showed that differences in mental health scores of women became significant at age 29 as the mental health trajectories diverged over time. Specifically, women in the inactive work-family life course reported the highest scores of mental health problems across young adulthood. Conclusion: Our findings suggest that there are no significant differences in mental health trajectories across work-family life courses during young adulthood. For women, a significant difference in mental health problems emerged at age 29, implying a longer follow-up is needed to explore the course of mental health problems beyond young adulthood. Future studies should also examine which specific work-family events and transitions captured in work-family life courses are associated with subsequent mental health problems.

TALK 3: Prenatal Determinants of Anxiety Symptoms in Middle Childhood

Presenter: Ben Fletcher, University of Auckland

Co-authors: Caroline Walker, Emma Marks, Jane Cha, Karen Waldie, University of Auckland; Zaneta Thayer, Dartmouth

University

Anxiety disorders are one of the most prevalent mental disorders worldwide affecting approximately 7% of children and adolescents globally with a lifetime prevalence of 15- 20%. Persistent anxiety disorders and the associated challenges can severely affect an individual's daily functioning, social relationships, and school and work performances across the lifespan. Additionally, the recent COVID-19 pandemic severely impacted children and adolescents' mental health, including anxiety symptoms. it is therefore critical to identify factors associated with the development of anxiety and determine which if these are potentially modifiable. Substantial and accumulating evidence exists to link adverse early life environments with poorer long-term health and wellbeing, including an increased risk of anxiety disorders. We therefore hypothesised that an adverse prenatal environment would be associated with increased anxiety symptoms in offspring in middle childhood. The Growing Up in New Zealand longitudinal study of child development was utilised to determine the association between prenatal factors and anxiety symptoms at age 8 years (n=4922). The current study investigated three groups of prenatal factors: prenatal mental health, teratogens and prenatal health behaviours. Preliminary results suggest that maternal mental health during pregnancy is significantly associated with anxiety symptoms in children and that exposure to teratogens and some health behaviours may also be associated with anxiety symptoms. Final modelling to determine which of these factors is associated with anxiety symptoms in children will be discussed.

TALK 4: Upward Educational Mobility as a Booster for Psychological Wellbeing? Consequences of Intergenerational Mobility for the Parental Generation

Presenter: Alina Schmitz, Technische Universität Dortmund

Co-author: Rasmus Hoffmann, University of Bamberg

Education is a central determinant of a person's opportunities and life chances over the life course. Although children of parents with low education, on average, achieve a lower social position than their peers from well-off families, intergenerational upward educational mobility can take place. Its effects on life circumstances of the persons concerned (the younger generation) have been increasingly studied. In contrast, the impact on the parental generation have not been studied yet, although life course research suggests familial relationships between generations to be a central determinant of wellbeing until old age. We study the impact of upward intergenerational mobility on the psychological wellbeing of older parents with low educational attainment. Based on data from the Survey of Health, Ageing and Retirement in Europe (SHARE), we shed light on the following questions: Does upward educational mobility not only affect the life courses of the upwardly mobile, but also the living conditions of the parents? Does the upward educational mobility of the children affect the well-being of the parents? If yes, for which subgroups and by which mechanisms? Our sample includes parents in the age group 50+. It provides information on their own educational background, other socioeconomic characteristics, health and well-being. Furthermore, respondents give information on their adult children's education and further socioeconomic characteristics. Finally, we have information on the relationship between the two generations in terms of social connectedness and exchange of financial or instrumental support. We expect

that parents can profit from their children's upward educational mobility, as higher education goes along with various resources to support the parents (e.g., economic means, social support). Another mechanism may be the good feeling about the fact that their children "made it". In that sense, upward educational mobility of the children could attenuate the cumulation of risks for wellbeing in lower status groups.

TALK 5: The Role of Social Support as a Protective Factor Following Cumulative Childhood Adversity for Adulthood Internalising Disorder

Presenter: Mary Buchanan, University of Otago

Co-authors: Giles Newton-Howes, Ruth Cunningham, Geraldine F.H. McLeod, Joseph Boden, University of Otago

Purpose: The impact of social support as a protective factor following childhood adversity is understudied. The aim of this present study was to examine how social support mediates the impact of cumulative exposure to adversity in childhood on internalising disorder in adulthood.

Methods: The Christchurch Health and Development Study (CHDS) is a general population birth cohort, born in 1975 and representative of Christchurch, New Zealand at the time of the cohort's birth. The present study used the generalised estimating equations (GEE) framework to analyse direct relationships between a cumulative measure of childhood adversity (CA) and internalising disorders (major depression, and any anxiety disorder), and indirect relationships through social support.

Results: Results indicated a dose-dependent pattern in the association between increased exposure to CA and worsened odds of a diagnosis for major depression and any anxiety disorder, respectively. There was a significant mediating effect (OR = 0.98, p<.001) of social support on the direct relationships between CA and both major depression and any anxiety disorder.

Conclusion: Social support reduces the impact of childhood adversity on adult mental health, and is therefore a target for future work examining potential interventions following CA. However, future research is needed to examine the importance of reducing childhood adversity itself, as well as examining how multiple protective factors work together to reduce the burden of CA.

6E INDIVIDUAL PAPERS (YOUNG PEOPLE IN EDUCATION AND EMPLOYMENT)

TALK 1: Association of School Connectedness with Exclusion and Truancy: Evidence from the UK Millennium Cohort Study Presenter: Aase Villadsen, University College London

School exclusion and truancy are causes for concern as they are associated with poorer child outcomes, and with lasting impact on individuals lives and long-term societal costs. Therefore, identifying factors that reduce exclusion and truancy is highly important, and research that uses a longitudinal research design is especially valuable in terms of establishing the direction of the association. Using data from the Millennium Cohort Study, a birth cohort study following around 19,000 children born at the start of the century in the UK, this paper examines school connectedness (measured at ages 7, 11, and 14) in relation to both exclusion and truancy (measured at ages 11 and 14). It examines the reciprocal association by examining school connectedness both as a predictor and as an outcome of exclusion and truancy. The latter association is examined in fixed-effects models, which are based on within-child comparisons across time (age 11 to 14), with the advantage of this analytical approach being that it eliminates time-invariant (fixed) unobserved differences, or selection effects, thereby providing more robust causal estimates. Additionally, associations between school connectedness and exclusion and truancy are examined by gender.

TALK 2: Socioemotional Trajectories in Early Childhood and the Family Environment: A Cohort Study in a Developing Country Presenter: Peter Fitermann, Universidad de la República

Co-author: Alejandra Marroig, Universidad de la República

Unfavourable social and family environments are associated with adverse non-cognitive and socioemotional developmental outcomes during childhood, which may extend to adolescence and adulthood. This can result in school performance problems, more antisocial behaviour, and lower wages in the labour market. Yet, few studies analyse the non-cognitive and socioemotional trajectories of children living in developing countries. We used data from Encuesta de Nutrición, Desarrollo Infantil y Salud (ENDIS), a prospective population-based cohort study in Uruguay. Socioemotional (i.e. internalizing and externalizing) problems were measured between 1.5 and 9 years using the Child Behaviour Checklist (CBCL). We estimated trajectories of socioemotional problems using linear mixed models with standardized scores and adjusting by sex, socioeconomic position, and whether the father provides care at home for the child. The results show that boys have higher socioemotional problems than girls (Beta boys = 0.165, p<0.001) which could be explained by differences in the development of girls and boys. A worse socioeconomic position is associated with higher scores of CBCL (Beta poors = 0.233, p<0.001) which indicates more socioemotional problems. Finally, for children whose father is involved in direct care tasks, socioemotional problems are significantly lower (Beta fathers = -0.198, p<0.001) which may be due to a favourable family environment or a more equal division of caring tasks at home between the mother and father. In this analysis, we contribute to a better understanding of socioemotional trajectories during childhood in a developing country, providing new insights for the design of better policies.

TALK 3: The Associations Between Bullying Victimisation in Adolescence on Mental Health and Labour Outcomes in Adulthood

Presenter: Alison Fang-Wei Wu, University College London

Morag Henderson, University College London

The links between bullying in adolescence, mental health and labour outcomes in adulthood have long been established. This study, however, examines the significance of different bullying aspects, including intensity (i.e. days of being bullied), types of bullying (i.e. violent and non-violent) and timing, which has often been overlooked in previous literature. This study uses comprehensive bullying indices to explore the associations between bullying in adolescence and mental health in adulthood (measured by the General Health Questionnaire (GHQ); life satisfaction at age 25; and labour market outcomes measured by number of months in unemployment (between ages 21-25). We used a nationally representative longitudinal cohort, Next Steps (n=7,650), run Poisson and Logistic regression models and apply multiple imputation on the missing data. All models control for gender, ethnicity, highest acquired qualification, living area, GHQ at age 16, parent's occupational level and language spoken at home. Our preliminary results show that having parents with lower occupation level, being female, being married and having more children at age 25 are associated with poor mental health and longer period of being unemployment. Bullying indices had mixed effect, for example, high intensity bullying is associated with poor mental health at age 25 and longer periods in unemployment. In addition, being bullied at age 14 and 16 are associated with developing severe mental health conditions at age 25. Both types of bullying (i.e. violent and non-violent) predict the prolonged unemployment between the ages of 21 to 25. Bullying indices in adolescence do not predict life satisfaction at age 25. Taken together, our results suggest that when bullying takes place is key to the development of poor mental health in later life. Researchers and policymakers could take this in account to better design effective intervention strategies.

TALK 4: Elementary School Indicators and Postsecondary Access in Toronto, Canada

Presenter: Robert Brown, York University

Co-authors: David Cameron, George Tam, Toronto District School Board; Kelly Gallagher-Mackay, Wilfrid Laurier University; Gillian Parekh, York University

Background: The relationship between postsecondary access and elementary school factors is far less understood or explored within the academic literature. Building on earlier research related to the Toronto District School Board (TDSB), researchers drew on six indicators intending to capture academic barriers within students' elementary schooling and examine their relationship to postsecondary access. Indicators included placement in self-contained special education programs, suspension, high absenteeism, and low achievement (through report card marks) in Reading, Writing, and/or Mathematics. Perspectives/Theoretical Framework: This study will draw on both DisCrit and QuantCrit as theoretical and methodology frameworks. Methodology and Data: The data was taken from a TDSB longitudinal study that followed students from when they entered Grade 2 (2006- 07) until they had finished five years of secondary study and transitioned into postsecondary school (Fall 2018, N= 10,409). A logistic regression will examine who applied to postsecondary study by the end of five years of secondary. Results: Preliminary results of this investigatory study show a very strong connection of elementary indicators, to postsecondary access. For instance, the majority of students who did not apply to postsecondary by the end of five years of secondary, had at least one 'indicator' between Grades 2 and 7. In contrast, the vast majority of students who confirmed an offer of admission from an Ontario university had no record of indicators between Grades 2 and 7. The proportion of students with indicators increased between Grades 2 and 7, across most variables. Scholarly significance: This study draws on key relationships between students' elementary schooling and postsecondary futures. Results offer important "moments" in students' schooling into which innovative intervention could further support students' academic outcomes. Further analysis will focus on the intersection of sociodemographic variables and elementary/secondary school indicators.

TALK 5: Externalising Behaviour Among Primary School Children: The Role of School and Classroom Context

Presenter: Emer Smyth, Economic and Social Research Institute

Co-authors: Merike Darmody, Economic and Social Research Institute

Much of the research on the role of school factors in student behaviour has focused on secondary level, with disengagement seen as playing an important role in students acting out within class. In contrast, research on younger children has tended to emphasise the role of individual and family factors in shaping their socioemotional difficulties, with less attention to the way in which behaviour is constructed within the school and classroom. This paper uses longitudinal data from the Growing Up in Ireland (GUI) study to examine changes in student behaviour between five and nine years of age. The outcome is teacher assessed externalising behaviour, measured using the conduct and hyperactivity subscales of the Strengths and Difficulties Questionnaire (SDQ). Externalising behaviour among nine-year-olds is more prevalent among children whose families report financial strain, who live in urban areas, who have a chronic illness/disability and are from lone-parent and migrant-origin families. Externalising behaviour is much lower among girls and among those whose parents have higher levels of education. Behaviour is also responsive to the overall school and class context, being more prevalent in schools with a higher concentration of socio-economic disadvantage, where the teacher views the relationship as conflictual and where the child has more negative attitudes to school and school subjects. Higher levels of externalising behaviour are found among children who regularly complained about school at age five. Both teacher-child conflict and closeness at age five are associated with higher levels of externalising behaviour at age nine, suggesting that there may be an optimal balance in the quality of this early relationship. In sum, the paper points to a complex dynamic between school and class context and externalising behaviour from early on in primary school, suggesting the need to examine and address behaviour difficulties within context.

6F NO PRESENTATIONS

7A SYMPOSIUM

The Repercussions of Childcare for Maternal Lives: New Insights from German Data

Convenor: Christina Boll, German Youth Institute (DJI)

As primary caretakers, women face daily challenges to balance different needs. Many women withdraw from the labour market, which can entail significant economic risks. This is particularly true after separation and divorce, but holds also for women who are single mothers from childbirth. Mothers' daily lives and well-being are therefore dependent on their own and relevant actors' resources, especially those of their ex-partners and the state. Presenting new evidence based on five German data sets, the symposium discusses the prevalence of shared care arrangements among parents in Germany today and investigates the access of single mothers to ECEC as well as the effects of a legal reform enforcing mothers' employment obligations. Further, it sheds light on welfare recipients as a particularly vulnerable group and investigates their (re)entrance into employment. Addressing pension claims, the symposium finally synthesizes the long-term economic repercussions of maternal care biographies and how and to what extent the German welfare state buffers associated individual risks.

TALK 1: Who Stays and Who Goes? Factors Associated with Stability and Change in Post-Separation Care Arrangements

Presenter: Claudia Recksiedler, DJI – German Youth Institute

Co-authors: Christine Entleitner-Phleps, Alexandra Langmeyer, Christina Boll, Sabine Walper, DJI – German Youth Institute Changing legal and cultural conditions across Europe led to a higher share of parents practicing shared care upon separation, in part because this allows for shared parental roles and children's access to both parents. However, prior studies documented that, in countries with little institutional support for shared care, fewer and a highly selective group of families (e.g., those who were more affluent and less conflict-ridden) practiced it. So far, no clear legal pathways toward shared care exist in Germany. There is also only sparse information concerning the spread, characteristics, and family dynamics of shared care families based on cross-sectional data. Profiling the German case, we examine how the prevalence of shared care compared to sole care arrangements, its sociodemographic correlates, and the associations with family dynamics evolved. Data stem from two waves of the representative panel "Growing up in Germany" collected in 2019 and 2021. Our analyses are based on parents' reports on 558 minors and include measures of children's overnight stays at each parental residence and the distance between them, the frequency of parent-child contact, coparenting problems, and families' socioeconomic standing at both waves. Results are discussed in light of implications for policy and practice, parents' economic needs, and issues related to self-selection into care arrangements over time.

TALK 2: Prioritizing Single Parents in Institutional ECEC Admission

Presenter: Hannah S. Steinberg, DJI – German Youth Institute

Co-authors: Yasmin Öztürk, Simone Schüller, DJI – German Youth Institute

Single parents often rely on institutional childcare to enable employment. However, there is still a significant gap between demand and supply in institutionally provided early childhood education and care (ECEC) in Germany. Are single parents prioritized in ECEC access? Little is known about the absolute and relative importance of single parent status in the allocation of slots in childcare facilities in Germany. We employ survey data from the National Educational Panel Survey (NEPS, 2015-2018) and the "Indicator-based monitoring of structural quality in the German early childhood education and care system" (ERIK, 2020-2021), in which institution managers and youth welfare offices were asked about the relevance of certain admission criteria. Our study provides a first descriptive insight into how the prioritization of single parents developed over the last years and how single parent status compares with other criteria in ECEC admission, such as parental employment. Furthermore, we investigate systematic differences, e.g., by type of provider, region or regional childcare gap.

TALK 3: Policy Reform and Employment After Divorce: Evidence from the German Maintenance Reform of 2008

Presenter: Michaela Kreyenfeld, Hertie School

Co-author: Daniel Brüggmann, German Pension Fund; Sarah Schmauk, Humboldt University; Katharina Wrohlich, DIW Berlin In 2008, the German government enacted a maintenance reform (Unterhaltsrechtsreform). Prior to this reform, ex-spousal maintenance was based on the principle of ex-spousal solidarity. The reform refuted that principle and replaced it by the principle of 'self-reliance' of the ex-partners. In practise, it meant that ex-spousal support was restricted to few and exceptional cases.

In this paper, we use register data from the German Public Pension Fund to examine the effect of the Maintenance Reform on the employment and earnings of divorced women and men in Germany. The data 'VSKT' (Versichertenkontenstichprobe) of the years 2019 to 2021 provide monthly earnings and employment histories of roughly 4.5 million persons. As a method, we adopt a triple diff-and-diff approach (Olden & Møen 2021) to model the causal effect of the reform.

TALK 4: Employment Perspectives of Lone and Partnered Mothers Receiving Welfare Benefits in Germany

Presenter: Katrin Hohmeyer, IAB - Institute for Employment Research

Co-author: Christina Boll, DJI - German Youth Institute

Welfare benefit recipients who are capable of working are obliged to be available to the labour market and to take up any reasonable job. Beneficiaries who take care of children under the age of three are exempted from this obligation. Childcare-related employment interruptions are of social importance because, on the one hand, they can improve the well-being of parents and children. On the other hand, longer leave spells can harm parents' employment and earnings prospects. As primary caretakers, mothers are particularly vulnerable in this respect. We study the determinants of taking up employment for non-employed women, who become mothers while receiving welfare benefits in Germany during the time period 2007 to 2020. Our analyses are based on rich administrative data from the sample of integrated welfare benefit biographies (SIG) and event-history methods. We distinguish between single mothers and mothers with a partner.

TALK 5: Who Gets What from Whom? Profiling Divorced Mothers' Family and Employment Biographies and Resulting Pension Claims

Presenter: Antonia Birkeneder, DJI – German Youth Institute

Co-authors: Christina Boll, Simone Schüller, DJI – German Youth Institute

In the employment biographies of German mothers, low earnings and long employment interruptions frequently accumulate over the life course and lead to small pension entitlements. Those experiencing a divorce might receive a form of compensation from their ex-spouse through the equalization of pension rights (Versorgungsausgleich). Additionally, the German state grants pension claims for childcare obligations (Kindererziehungszeiten, Kinderberücksichtigungszeiten) or for (partial) occupational disability due to health reasons (Erwerbsminderungsrente). Using register data from the German Public Pension Fund (SUF-VSKT-VA 2015), our study aims to gain a better understanding of how the economic well-being of divorced mothers in terms of pension claims materialize in the light of different employment and care biographies. For this purpose, we conduct sequence and cluster analysis to obtain five distinct groups of divorced mothers' employment and care biographies. For these five profiles, we further examine the pension entitlements they gained through regular employment versus from their ex-spouse or the German state.

7B SYMPOSIUM

Resilience in Uncertain Times

Convenor: Meredith O'Connor, Murdoch Children's Research Institute

Adversity can arise for young people at the microlevel, such as individual experiences of parental divorce, death of a parent, or maltreatment. It can also arise at the macrolevel, with "mass trauma adversities" like natural disasters, war, and terrorism creating widespread disruption across the community, family, and peer contexts in which adolescents develop, threatening the health of whole populations. The COVID-19 pandemic is a recent example, where the virus and public health response to slowing its spread led to major social upheavals. For young people, these disruptions occurred during a developmental period defined by widespread changes to, and particular salience of, social roles and relationships. Resilience in response to such challenges is a product of the complex interplay between the personal attributes of individuals and features of their environments. At the individual level, it has been argued that with more frequent global disruptions, current and future generations of adolescents need highly developed capacities for adaptability and resilience. In addition, features of environments provide both a source of resilience and can facilitate or inhibit the use of personal assets. This symposium will explore resilience in response to micro and macro sources of adversity, and the mechanisms through which this occurs.

TALK 1: The Role of Adolescent Mental Health Competence in Shaping Psychosocial Outcomes During Earlier (2020) and Later (2021) Phases of the COVID-19 Pandemic

Presenter: Meredith O'Connor, Murdoch Children's Research Institute

Co-authors: Craig Olsson, University of Melbourne; Katherine Lange, Marnie Downes, Margarita Moreno-Betancur, Sharon Goldfeld, Murdoch Children's Research Institute; Lisa Mundy, Australian Institute of Family Studies; Russell M. Viner, Steven Hope, UCL Great Ormond Street Institute of Child Health

Purpose: Mental health competence (MHC) refers to a broad range of psychosocial skills that may help young people to cope with periods of crisis, as well as "bounce back" once an initial crisis has passed. We seek to understand the role of adolescent MHC in shaping psychosocial outcomes during COVID-19, contrasting earlier (Oct-Dec 2020) and later (June-Sep 2021) periods of the pandemic.

Methods: Data: Longitudinal Study of Australian Children (LSAC) – Baby (B; analysed N=2373) and Kindergarten (K; analysed N=2044) cohorts, established 2004. Measures: Pre-pandemic MHC exposure (parent-reported, 14-15yrs); psychosocial outcomes during the COVID-19 pandemic in 2020 (B=16-17yrs; K=20-21yrs) and 2021 (B=17-18yrs; K=21-22yrs) including mental health difficulties, life satisfaction, sleep outside guidelines, and alcohol outside guidelines.

Analysis: Logistic regression models were used to estimate associations between pre-pandemic MHC and psychosocial outcomes during COVID-19, adjusted for potential confounders (sociodemographic characteristics and prior mental health difficulties in childhood). Separate analyses were conducted for each outcome, cohort, and time point.

Results: There were meaningful effects of high pre-pandemic adolescent MHC on lower odds of serious mental health difficulties (OR=.62, 95%CI=.46, .84 to OR=.87, 95%CI=.66-1.15) and higher odds of life satisfaction (OR=1.12, 95%CI=.89, 1.40 to OR=1.40,

95%CI=1.09, 1.78). The estimated effects for sleep outside of guidelines (OR=.82, 95%CI=.65, 1.03 to OR=.91, 95%CI=.74, 1.12) and alcohol use beyond guidelines (OR=.69, 95%CI=.52, .94 to OR=1.07, 95%CI=.80, 1.43) were smaller in magnitude. Effects were somewhat stronger in the later as compared to earlier pandemic period for some outcomes (e.g., for life satisfaction B 2020: OR=1.12, 95%CI=0.89, 1.40; 2021: OR=1.32, 95%CI=1.08, 1.62; K 2020: OR=1.31, 95%CI=1.00, 1.71; 2021: OR=1.40, 95%CI=1.09, 1.78).

Conclusions: Psychosocial skills are assets that help maintain mental health and wellbeing during major challenges such as the COVID-19 pandemic and are also relevant to recovery once the acute crisis period has passed.

TALK 2: Are Adolescents Resilient to Adverse Childhood Experiences Able to Constructively Cope with Climate Change Worry?

Presenter: Stephanie Cahill, University of Manchester

Co-authors: Meredith O'Connor, Murdoch Children's Research Institute

Resilience refers to the ability of an individual to successfully adapt to adversity in their lifetime, which is dependent on context and resources. The process of adaptation is influenced by multiple systems of interaction, including family, school, community, and culture, and a child's trajectory is dependent on these systems of influence as well as individual and familial protective factors. Climate change is an existential threat with global consequences, or a mass-trauma adversity. This study investigates whether adolescents on longitudinal trajectories of resilient functioning can constructively cope with the worry associated with climate change. Using data from the Longitudinal Study of Australian Children (LSAC) Kindergarten cohort, the study examines the coping patterns of young people who show greater resilience to adversity. The results determine how high or low climate change worry predicts meaning and problem-focused coping for individuals on resilient vs. vulnerable trajectories. The findings of this study provide insight into the transportability of established resilience models to climate change-related outcomes and informs opportunities to promote "practical eco-worry" for the benefit of individual young people and society as a whole.

TALK 3: To What Extent Could Intervening on Interpersonal Racial Discrimination Reduce Inequities in Mental Health and Sleep Problems Among Aboriginal and Torres Strait Islander Children?

Presenter: Naomi Priest, Australian National University

Co-authors: Shuaijun Guo, Katherine Thurber, Australian National University; Rushani Wijesuriya, Margarita Moreno-Betancur, Murdoch Children's Research Institute; Catherine Chamberlain, University of Melbourne; Rosemary Smith, Janine Mohamed, The Lowitja Institute; Sharon Davis, Australian Institute of Aboriginal and Torres Strait Islander Studies

Background: Racism is a fundamental cause of poor health and health inequities for Indigenous children. This study aimed to examine the potential to reduce inequities in Indigenous children's mental health and sleep problems through eliminating interpersonal racial discrimination.

Methods: Data: Speak Out Against Racism (SOAR; cross-sectional; N=2818) and Longitudinal Study of Australian Children (LSAC; longitudinal; N=8627).

Measures: Indigenous status (Indigenous/Anglo or European) (SOAR: 10-15 years; LSAC: 4-5 years); Mental health problems (yes/no) and sleep problems (yes/no) (SOAR: 10-15 years; LSAC: 14-15 years). Interpersonal racial discrimination (yes/no) (SOAR: 10-15 years; LSAC: 12-13 years). Using an interventional effects approach, we estimated the extent to which inequities in mental health and sleep problems could be reduced by eliminating Indigenous children's experiences of racial discrimination.

Results: Indigenous children (SOAR: n=409; LSAC: n=417) had a higher risk of poor mental health outcomes and sleep difficulties than their Anglo or European peers. We estimated that eliminating Indigenous children's experiences of interpersonal racial discrimination could reduce up to 42.5% of mental health inequities and up to 48.5% of sleep problem inequities.

Conclusion: Interventions that eliminate racial discrimination against Indigenous children have high potential to reduce the overburden of mental health and sleep problems. Interpersonal racial discrimination is just a tip of the iceberg and only one of many pathways through which systemic racism impacts Indigenous children's health. Systemic racism needs to be addressed through action directed by Indigenous peoples and communities.

TALK 4: Hair Cortisol as a Biomarker of Resilience to Pain Among Adults Living in the UK

Presenter: Tarani Chandola, University of Hong Kong

Co-authors: Stephanie Cahill, University of Manchester; Meena Kumari, University of Essex

Background: The search for biomarkers of resilience to stress has resulted in several proposed potential biomarkers, including hair cortisol, although the conceptual difference between biomarkers of stress and resilience has not been adequately explored. Moreover, it is difficult to infer whether low cortisol levels after exposure to pain reflects an adaptive or resilient response, or a lack of a stress response.

Methods: Two population-representative datasets, English Longitudinal Study of Aging (ELSA) and UK Household Longitudinal Study – Innovation Panel (UKHLS-IP), were used to examine the effect of recent pain on hair cortisol levels (using quantile regression methods) and the association between a resilient or inadequate response to stressors and depressive symptoms.

Results: We found a U-shaped relationship between pain and cortisol levels, with the strongest effects at the lowest and highest levels of the cortisol distribution. Adults with a low cortisol response to pain appear to be a resilient group, while those with a high cortisol response have a prolonged cortisol response to pain. Adults in the middle of the cortisol distribution do not show any cortisol response to their pain, suggesting an inadequate response to pain. The resilient group with low cortisol response to pain is associated with low levels of depression, while those with in an inadequate or prolonged cortisol response to pain have significantly higher levels of depressive symptoms.

Conclusion: These cross-sectional and longitudinal associations highlight the protective effects of low cortisol levels against depression and poor mental well-being among adults who report pain. Low cortisol levels after pain may be an indicator of resilience. Adults with an inadequate and a prolonged cortisol response after a pain stressor are at risk of poor mental health.

TALK 5: Associations Between Adolescent Mental Health Competence and Markers of Academic Performance and Aspirations: Evidence from the Millennium Cohort Study

Presenter: Steven Hope, UCL Great Ormond Street Institute of Child Health

Co-authors: Russell M. Viner, UCL Great Ormond Street Institute of Child Health; Meredith O'Connor, Murdoch Children's

Research Institute

Mental health competence (MHC) is a skills-based conceptualisation of positive mental health which involves psychosocial capabilities, including regulating emotions and interacting well with peers. These skills are malleable, and school-based interventions, such as social and emotional learning (SEL) programmes, can achieve sustained benefits in key domains of MHC. MHC skills are associated with a range of outcomes, including cognitive abilities in childhood and early adolescence. However, there is little evidence as to whether MHC supports subsequent academic outcomes. Using data from a nationally representative cohort of young people (the UK Millennium Cohort Study), we explored the extent to which MHC skills in mid-adolescence (14 years) are associated with subsequent academic markers (17 years). Socioeconomic disadvantage and mental health problems are associated with both poorer MHC and school performance. We therefore included measures of sociodemographic characteristics and mental health problems (14 years) in multivariable regression models, to ascertain whether MHC benefits to educational outcomes would remain after accounting for these risk factors. We found that adolescents with high MHC (compared to others) reported having achieved a greater number of public examination passes, were more likely to have attended school or college beyond the minimum leaving age (16 years), and to have higher expectations that they would attend university. These results will be supplemented by further analyses using linked administrative educational data for cohort members in England. Supporting the development of MHC skills in young people, including those experiencing socioeconomic disadvantage or mental health problems, may offer an opportunity to improve school engagement and achievement, and, in turn, a successful transition into adulthood.

7C INDIVIDUAL PAPERS (DATA COLLECTION 2)

TALK 1: What Insights Do Paradata Give Us on Respondents' Collaboration Before, During and After the Pandemic? A Growing Up in Québec Analysis

Presenter: Jessica Gagnon-Sénat, Institut de la statistique du Québec

Co-authors: Catherine Fontaine, Institut de la statistique du Québec

Growing Up in Québec is the revised second edition of the Québec Longitudinal Study of Child Development (QLSCD). Its main objective remains similar to that of the first edition: to better understand the factors that contribute to the wellbeing and development of young people born in Québec (Canada) in 2020-2021. A pilot study underway since 2018 has allowed us to observe variations in pre-pandemic and post-pandemic collaboration during outreach. This presentation will first show the participation rates for five sweeps of the pilot study (children aged 5 months (in 2018) to 5 years (in 2023)), which encompass a pre-pandemic period (Sweep 1 and 2), a pandemic period (Sweep 3 and 4), and a post-pandemic period (Sweep 6). Data collection methods changed during the COVID-19 pandemic, but the pre-pandemic and post-pandemic periods of the pilot study both utilize home visits. Most of the presentation will highlight various changes in participation data in the five waves such as the number of calls required to book an appointment, the number of appointment cancellations, the duration of calls and the duration of questionnaires. These statistics are measured by exploiting the pilot study's paradata generated by the computerized outreach tools at the Institut de la statistique du Québec (ISQ). The pilot study oversampled Quebeckers belonging to socioeconomic poverty which caused this group to be overrepresented in the sample (50%). Thus, the results presented will be distinguished by socio-economic status.

TALK 2: Evaluating the Impact of Alternative Consent Elements on Recruitment to Longitudinal Research

Presenter: Elizabeth Hughes, Murdoch Children's Research Institute

Co-authors: William Siero, Yichao Wang, Fiona Mensah, Melissa Wake, Murdoch Children's Research Institute

High rates of recruitment into longitudinal and life course studies depend heavily on how receptive potential participants are to the study design, including the scope of consent. Despite increasing participant and public involvement during the planning stages of many large-scale studies, researchers' confidence in the ultimate success of a study design can remain in doubt until recruitment is well underway. Even then, which elements are making a significant impact on recruitment can remain unclear. Generation Victoria (GenV) is a whole-of-state longitudinal research initiative comprising parallel birth and parent cohorts based in Victoria, Australia. Prior to launching state-wide recruitment, we implemented a nested study within our Vanguard Cohort to assess the impact of key design elements of GenV on recruitment uptake and efficiency. Over 5 months, alternative recruitment and consent processes were implemented using pre-determined combinations of five items – collection of parent and infant saliva samples, collection of an infant stool sample, consent to access existing bio samples (e.g., leftover samples from routine

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antenatal tests), consent to data linkage with social dataset (e.g., welfare, justice), and consent to update contact details from agencies and public records. Reassuringly, we found no substantial impacts on approach or recruitment rates for any of the items tested. While collection of saliva samples significantly increased the length of the recruitment visits, this was minimal, and no other items demonstrated an impact on the length of the recruitment visit. The study provided important direction in the final design stages of GenV and ultimately its success in recruiting a large, representative sample. Further, it provides a novel approach for other studies to evaluate and predict the impact of their proposed design on recruitment.

TALK 3: Swabbing at Home: Biological Data Collection During a Pandemic

Presenter: Karl Crosby, University of Auckland

Co-authors: Emma Marks, Caroline Walker, University of Auckland

The twelve-year data collection wave for the Growing Up in New Zealand study provided a rare opportunity to collect skin microbiome data during a global pandemic. This was coupled with the fact that a large proportion of New Zealand's population at the time was COVID-19 naïve, which will enable us to look at microbiome changes for those who had the infection (either during the swabbing or recently) versus those who had not. This paper explores the adaptions required for a successful transformation to a remote biological data collection, from development of new participant information sheets through to new delivery process workflows and integration of collection within the wider participant journeys. Like previous data collection waves done face to face we collected three skin swabs from the nose, throat and skin but pivoted to a microbiome specific collection kit designed for at home collection that can provide bacterial/viral/fungal information at the collection time point. Preliminary analyses indicate that despite the challenges, the data collection produced higher return rates (60%) and lower failure rates (<2%), when compared to the earlier face to face pilot collection. Positive improvements found during the switch to a remote collection has helped to demonstrate the resilience and adaptability of the Growing Up in New Zealand cohort and highlighted key learnings that can be implemented in future data collection waves. The resulting microbiome data will be novel as it will be the largest skin microbiome collection in NZ children as well as having occurred during a viral pandemic. This data has the potential to provide evidence on the health of the young people of New Zealand and better inform policies to improve overall health and wellbeing.

TALK 4: Harmony: Development and Use of Harmony - A Natural Language Processing Tool to Facilitate Measurement Harmonisation Across Studies

Presenter: Bettina Moltrecht, University College London

Co-authors: Eoin McElroy, Mauricio S. Hoffmann, Thomas Wood, George Ploubidis, University College London

Integrative epidemiological and intervention research has been hindered by inconsistent approaches to the measurement of common mental health problems. For instance, reviews have estimated that over 280 questionnaires have been used to measure depression. One crucial approach to addressing this is the harmonisation of questionnaires, i.e., identifying similar question items that tap into the same symptom from different scales, and testing their measurement properties and equivalence empirically – thus enabling researchers to compare and combine findings across existing studies, even when different measures have been administered. Successful harmonisation and thus pooling of data allows not only for greater statistical power and more refined subgroup analysis, but also enhances generalizability of findings and the capacity to compare, cross validate data and findings from different countries.

We will demonstrate the development and use of our new Al-driven tool "Harmony" (https://harmonydata.ac.uk/app/#/) and the different functionalities that allow researchers to identify, compare and match survey items across multiple studies in a more efficient and transparent way. We then present a research case-example using data from the Millennium Cohort Study and the Brazil High Risk Cohort study to answer how factors of social connection and their impact on anxiety and depression in young people differ across the two countries. Lastly, we would like to invite the audience to discuss challenges around data harmonisation, especially considering cultural and contextual adaptations.

7D INDIVIDUAL PAPERS (MENTAL HEALTH 3)

TALK 1: Loneliness, Sense of Belonging and Psychosomatic Complaints Across Late Adolescence and Young Adulthood: A Swedish Cohort Study

Presenter: Karina Grigorian, Stockholm University

Loneliness and a sense of belonging refer to social connectedness and are associated with young people's health; however, the relationship between these constructs and their impact on health is still being discussed. The dual continuum model has been suggested (Lim et al., 2021) where these two constructs are regarded as independent but related. Four groups of individuals are defined in the model depending on the level of loneliness and belonging: socially fulfilled (low loneliness, high belonging), socially searching (high loneliness, high belonging), socially distressed (high loneliness, low belonging), and socially indifferent (low loneliness, low belonging). Swedish cohort data collected among late adolescents (age 17-18 at baseline in 2019) who were followed up in young adulthood (age 20-21 in 2022) (n=2684) was used to examine the association between these distinct groups of individuals and psychosomatic complaints. Three psychosomatic complaints were measured: stomach aches, headaches, and sleeping difficulties, and a summary index (range 3-15) was calculated. Linear regression analyses showed that loneliness and a sense of belonging were cross-sectionally associated with psychosomatic complaints (additional adjustment for sociodemographic characteristics barely affected the estimates). The socially fulfilled group reported fewer psychosomatic complaints compared with the other groups, while the socially distressed group reported the highest level of psychosomatic

complaints. Furthermore, the socially indifferent group reported fewer psychosomatic complaints than the socially searching group. The prospective analysis supported these patterns; however, after adjustment for earlier psychosomatic complaints, only the socially distressed group showed a significant positive association with subsequent psychosomatic complaints. These findings confirm that the dual continuum model reflects the complexity of social needs and their association with health complaints.

TALK 2: Work Experience and Mental Health from Adolescence to Mid-Life

Presenter: Jeylan Mortimer, University of Minnesota Co-author: Jeremy Staff, Pennsylvania State University

Adam Smith, Karl Marx, and Emile Durkheim drew attention to psychological differences among those who pursue distinct lines of work. A prevalent assumption in their classic writings, and today, is that work experiences affect psychological development; contemporary analysts focus on dimensions indicative of mental health. Still, such etiology of work-related psychological differences cannot be assumed, as they may instead be attributable to selection processes to the extent that individuals can choose, or be selected, to various lines of work based on their prior characteristics. Drawing on 11 waves of longitudinal data obtained from a cohort of 9th grade students followed prospectively to age 45-46, we examine whether key psychological dimensions indicative of mental health (mastery, depressed mood, and self-esteem) change in response to employment itself and to work experiences (e.g., self-direction, work stress, learning and advancement opportunities, hourly pay and wage satisfaction, and work hours). The findings, based on a fixed effects modelling strategy, indicate that observed work-related psychological differences are not attributable to stable individual proclivities. Moreover, indicators of the quality of work were more predictive of mental health than employment per se (which did not significantly affect mastery and self-esteem), work hours (no significant effects), or hourly wages (which only reduced depressed mood). No other study has consistently measured work quality and mental health over such a long period of time, nor has prior research simultaneously incorporated both multiple dimensions of work experience and mental health. Contrary to the "aging stability hypothesis" we did not find that the impacts of work experiences vary by life stage (adolescence, young adulthood, and established adulthood). We conclude that mental health is responsive to changing experiences at work from mid-adolescence to mid-life.

TALK 3: Intergenerational Transmission of Trauma: Psychosocial Adjustment of the Children of Care Leavers at Age 17

Presenter: Sam Parsons, UCL Institute of Education

Co-authors: Ingrid Schoon, Emla Fitzsimons, UCL Institute of Education

There is persistent evidence showing that individuals who spend time in out-of-home care (OHC) are at a higher risk of adverse psycho-social outcomes in later life. There is however less knowledge if this disadvantage transfers to the second generation. This presentation draws on evidence from the UK Millennium Cohort Study (MCS) to examine the psycho-social adjustment of children of care leavers, i.e., adjustment in the second generation. MCS is a multi-purpose ongoing longitudinal study of approximately 19,000 babies born to families living in the UK between September 2000 and January 2002. In our analytic sample of 18,810 we identified 305 (1.6%) with a mother with OHC experience and made use of multiple imputation techniques to minimise the impact of missing data. The experience of OHC, often characterised by psycho-social deprivation and inconsistent caregiving, can be considered as a distinct type of traumatic experience. While there is diversity of experience, all children with OHC experience have been separated from their birth parents and were under institutional guardianship. In this study we examine how mother OHC experience is associated with a range of outcomes in their teenage children at 17. The findings suggest that maternal OHC experience can cast a long shadow. Compared to the general population with no OHC experience children of care leavers reported higher levels of behavioural and mental health problems, including self-harm and suicide attempts, and more have been cautioned by the police. These differences remain after controlling for the teenager's sex, age, ethnicity, family socio-economic background measures, and results in public examinations at age 16. The wellbeing of children of one of the most disadvantaged groups in our society clearly needs to be better addressed if we are to minimise the intergenerational transmission of disadvantage associated with OHC being passed on to children in future generations.

TALK 4: The Impact of Victimization on Adolescent Boys' Mental Health

Presenter: Camille Ingham, Penn State University

Co-authors: Andrea Hazelwood, Jeremy Staff, Penn State University

Victimization experiences are associated with serious mental health problems in adolescence, especially among girls. Since boys have higher rates of victimization and less research has focused on boys' victimization experiences, we want to extend this line of research to create a more robust understanding of the mental health of male victims of crime. The current study utilizes prospective data from a nationally representative cohort of children in the United Kingdom who were followed from birth to age 17 to evaluate the association between victimization experiences (non-violent and violent) and adolescent mental health. Using data from 5,323 boys in the Millennium Cohort Study, we estimated a series of OLS and logistic regression models predicting adolescent psychological distress, past-year self-harm, and lifetime attempted suicide based on victimization experiences at age 14. Boys who experienced victimization at age 14 were more likely to self-harm at age 17 and ever attempt suicide than non-victims, even after controlling for childhood delinquency and mental health, parental mental health, neighbourhood safety, and sociodemographic background. Age 14 victimization was also positively related to higher psychological distress scores at age 17. This study suggests that victimization experiences can have lasting effects on boys' mental health.

TALK 5: Dyadic Loneliness, Age, and Cognitive Functioning among Midlife and Older Black Couples

Presenter: Jeffrey E. Stokes, University of Massachusetts Boston

Co-author: Heather Farmer, University of Massachusetts Boston

Cognitive health is a growing concern for the older Black population in the United States, whose risk for dementia is about twice that of White older adults. Moreover, close relationships such as marriage are critical for health and well-being in later life and may even become more influential as individuals age. Yet even married older persons can experience loneliness, particularly when relationship quality is poor.

Within older adults' marriages, loneliness has been linked with individuals' own and their partners' mental, physical, and cognitive health. However, little research has examined these relationships within the older Black population, and even less work has situated Black older adults within a relational, dyadic context. This despite the fact that Black Americans experience loneliness at higher rates and severity than the White population. Finally, research is needed on the circumstances under which partners' loneliness may be influential for cognition, including potential variation by individuals' age or their own level of cognitive functioning. This study used longitudinal dyadic data from the Health and Retirement Study (2010-2016; n=1,270 participants from 635 couples) from both partners in opposite-sex midlife and older married couples where at least one partner reported being Black or African American. Lagged dependent variable (LDV) structural equation modeling (SEM) addressed our research questions.

Results indicated that (1) loneliness was not associated with participants' own cognitive functioning 4-years later, yet (2) husbands' loneliness was associated with worse cognitive functioning 4-years later for wives who had high baseline cognitive functioning themselves, and (3) wives' loneliness was associated with worse cognitive functioning 4-years later only for oldest-old husbands. Findings indicate that loneliness has dyadic consequences for cognitive functioning among older Black couples, but that context is crucial for determining which older partners are at greatest risk of experiencing harmful cognitive repercussions from a partner's loneliness.

7E INDIVIDUAL PAPERS (YOUNG LIVES AND EDUCATION)

TALK 1: Leaving School: A Healthy Transition in Late Adolescence?

Presenter: Max Herke, Martin-Luther-University Halle-Wittenberg

Background: Adolescents' subjective well-being (SWB) is an important indicator of quality of life and has been extensively researched in adolescents still attending schools in large-scale health survey. It has been shown that school has a great impact on SWB, but studies on the changes in SWB when adolescents leave school are rare, as this requires longitudinal designs. This study examines changes in SWB of adolescents in Germany over the two years prior and after leaving school and differences by school type, socioeconomic position, gender, and family structure.

Methods: We use data from a cohort of ninth graders of the German National Educational Panel Study, which were first surveyed in 2010 and followed up annually since. Using growth curve modelling based on multilevel models, we analyse trajectories of SWB as well as possible moderation by school type, parental education, household income, gender, and family structure. The final analyses include 19,767 observations of 6,599 individuals.

Results: SWB of adolescents shows a considerable increase after leaving school. SWB is relatively stable in the two years prior and the two years after the transition. This change is moderated by several factors. There is a smaller increase for those adolescents, who leave after completing higher secondary education, who live in nuclear families, and who are male. These adolescents, however, have greater SWB before the transition, so leaving school decreases these differences.

Conclusion: These findings indicate that schools might not provide the resources to adolescents necessary for successfully accomplishing the multitude of developmental challenges present. Physical, emotional, cognitive and social changes have to be managed, and schools provide a crucial context for adolescents, but also add increasing performance pressure and demands.

TALK 2: Key Factors Associated with Young People's Schooling at Age 12

Presenter: Josie Tait, University of Auckland

Co-authors: Molly Grant, Kane Meissel, Pat Bullen, Elizabeth Peterson, John Fenaughty, Sarah-Jane Paine, University of Auckland

Students who are engaged at school have been found to be more actively involved in learning tasks, have better achievement outcomes and are less likely to be involved with the judicial system later in life. Using data from Growing Up in New Zealand, a large longitudinal birthcohort study, we conducted a multiple regression analysis to identify key factors that influence school engagement in the middle years of schooling, considering individual factors and factors within the home and school contexts. We focused on data collected at the 12-year-old time point to identify the factors which are important at the transition into early adolescence, and as this data collection point was in the midst of the COVID-19 pandemic when New Zealand students were cycling in and out of face-to-face learning and distance learning from home. Experiences of schooling prior to Covid-19 lockdowns (at age 8), early in the pandemic (age 10), and after most lockdowns ended (at age 12) were also examined using descriptive

statistics. Results point to student-teacher relationships and academic efficacy being the factors with the strongest positive association with school engagement at age 12, and depression having the strongest negative association. These findings have important implications for itinerant teacher education, teacher professional development, and education policy as well as for young people experiencing developmental and contextual changes throughout their lives.

TALK 3: Socio-Demographic Trends in Confidence in State Institutions Among Older Adolescents

Presenter: Aisling Murray, Department of Children, Equality, Disability, Integration and Youth (Ireland)

Irish young people aged 17/18 years were asked how much confidence they had in institutions such as the Church, the police, the education/health/social welfare systems and politicians, The questions were administered as part of a lengthy and wideranging survey in Wave 3 of Growing Up in Ireland, a national longitudinal study. Data collection was in 2015. Overall, the institutions held in the least confidence (i.e., 'not very much' or 'none at all') were politicians (87% little or no confidence) and the Church (71%). The institutions in which 17-year-olds had most confidence, were the 'education system' (32% low confidence/68% 'quite a lot' or 'a great deal') and the police (26% low confidence); however, there were notable differences in the latter according to socio-demographic characteristics while confidence in the education system was comparatively consistent. Comparing confidence in institutions using young person's gender, and household characteristics of one-parent family, income quintile and social welfare dependency, suggests that indicators of disadvantage and male gender are associated with less confidence - with some exceptions where little or no difference was observed (e.g., the social welfare system). As noted, variations in confidence in the police were particularly noticeable; albeit being the institution where the overall sample had most confidence. For example, just 24% of young people in two-parent families lacked confidence in the police, compared to 36% of those in a one-parent family – and similar gaps were observed for the other socio-demographic indicators. Young people in a one-parent family were also more likely to lack confidence in the education system (37% compared to 31% for twoparent families) even though there was little difference when comparing groups on the basis of income, social welfare dependency or gender. These findings are relevant to policy implementation and public information messaging among emerging adults, particularly in times of uncertainty.

TALK 4: Development of School Enjoyment in Lower Secondary School and its Effect on Students' School Achievement

Presenter: Saikat Ghosh, Leibniz Institute for Educational Trajectories (LIfBi)

Co-authors: Alyssa Grecu, Nele McElvany, TU Dortmund

School enjoyment, as a positive emotional attitude towards the whole learning environment at school, is related to learning activities, learning content and social relationships with teachers, classmates and peers (Ömeroğulları & Gläser-Zikuda, 2021). Several studies emphasized positive correlations between school enjoyment and students' cooperation in class, their engagement and motivation in learning, their interest in learning content, and educational achievement (see Huebner & Gilman, 2006; Kulakow & Raufelder, 2020; Hagenauer & Hascher, 2014; Geis-Thöne, 2020; Morris et al., 2021). However, the implication of the variation in well-being over time on educational outcomes is only captured indirectly. Against this background, this study used longitudinal data from the National Educational Panel Study (NEPS) to analyse the development of school enjoyment during the transition to secondary school and its impact on student outcomes for 2294 students from grade four in primary school up to grade six in secondary school in Germany. The findings from this study significantly contribute to the existing literature on school enjoyment during the transition to secondary school. The study identified an increase in school enjoyment during the transition to secondary school (from 4th grade to 5th grade) but a sharp decline in enjoyment in the 6th grade. Therefore, school environments need to take into account students' needs to increase their level of enjoyment in school. Furthermore, it also shows a positive effect of school enjoyment on academic outcomes in Mathematics and German. This argues in favour of more research on exploring different dimensions of school enjoyment. Particularly, in the last two years of the pandemic, switching between home-schooling and learning in school might be understood as an additional transition between educational settings, and this might significantly affect students' school enjoyment and performance (Buchanan et al., 2022; Schwartz et al., 2021; Widnall et al., 2022).

7F INDIVIDUAL PAPERS (HEALTH AND EDUCATION)

TALK 1: Are There Health Costs to Upward Mobility? A Sequence Analysis of the Transition out of Higher Education and its link to Health Behaviour

Presenter: Miriam Siglreitmaier, Humboldt-Universität zu Berlin

Co-author: Vida Maralani, Cornell University

Young adults from disadvantaged families face many inequalities, for example in education or health. This study investigates social disparities in the transition from higher education to the labour market and whether different types of transitions are linked to certain health behaviours. Specifically, we investigate whether individuals from different social origins follow different school-to-work pathways and adopt different health behaviours. Drawing on data from the German Socioeconomic Panel, we first examine typical patterns of school-to-work trajectories of German university graduates aged between 23 and 30 years by employing sequence analysis which allows grouping longitudinal trajectories of categorical states with regard to their (dis-)similarity. Second, we investigate to what extent individuals from different lower versus higher social classes sort into different trajectories using multinomial regressions. The transition from leaving school to entering the labour market is increasingly relevant as the number of college degree holders has risen with differing individual economic returns. Successfully navigating this transition is crucial for long-term economic and overall well-being. This study investigates social class disparities in this transition. First, we hypothesize that graduates from disadvantaged families experience more complex school-to-work trajectories because of the difficulties they will likely face during this period. Second, we expect these upwardly mobile individuals

to slowly adapt to the health behaviours of the peers in their destination class. Third, we hypothesize that more complex and longer school-to-work transitions are linked with more detrimental health behaviours in this period. To our best knowledge, this study is the first to investigate the variation of health behaviours between young adults from different social backgrounds in the crucial transition from school to work. Understanding how individuals adopt certain health lifestyles is important because health behaviours mediate the relationship between socioeconomic status and health.

TALK 2: Protective Factors Associated with Resilience Among Children with Mild Learning Disability: Evidence from Two Prospective Cohorts

Presenter: Foteini Tseliou, Cardiff University

Co-authors: Jessica M. Armitage, Stephan Collishaw, Cardiff University

Mild learning disability (IQ 50-69) affects around 300,000 children and adolescents in the UK. Children with mild learning disability are at an increased risk of poor mental health, educational and psychosocial outcomes. Little is known about protective factors that promote resilience and optimise outcomes. The purpose of our study is to identify protective factors that are associated with better mental health, social and educational outcomes among children with learning disability. We will use data from two prospective UK cohorts, the Avon Longitudinal Study of Parents and Children (ALSPAC) and the Millennium Cohort Study (MCS), to identify children with mild learning disability and test whether childhood individual, family, and social protective factors are associated with better psychosocial outcomes. We hypothesise that a range of factors, including individual (e.g., prosocial traits), family (mother and father involvement with child, family social advantage), school (child school enjoyment) and wider social factors (friendship quality, peer problems, extra-familial support) will together predict more positive outcomes. School-level information on special education needs (SEN) and whether they have been issued with an official SEN statement for personalised provisions will also be included. Where repeated measures are available, we will test whether the timing of these factors is important, replicating analyses across cohorts. Using a person-centred approach, we plan to identify children that are resilient as those with positive functional outcomes, including educational attainment (A*- C GCSEs passed) and mental health via the Strengths and Difficulties (SDQ) questionnaire score at 16 years. Multiple imputation will help account for partial missing data, with sensitivity analyses testing robustness of findings across complete case and full imputation models. By identifying specific potentially modifiable factors that are linked to resilience, this study will offer insights into how to support children with learning disability and improve their educational and mental health outcomes.

TALK 3: Laying the Ground for a Longitudinal Study of Young People with Special Educational Needs

Presenter: Line Knudsen, National Centre for Social Research

Co-authors: Samantha Spencer, Chujan Sivathasan, Jessie Reddin, Martin Wood, National Centre for Social Research Improving our understanding of the views and experiences of young people with special educational needs and disabilities (SEND) as they move through the education system is key for policy makers and researchers looking to address inequalities in educational experiences and outcomes.

The Department for Education (England) commissioned the National Centre for Social Research (NatCen) to undertake a two-wave Discovery Phase study to inform plans to establish a large-scale longitudinal study with a population of children and young people with SEND. A key aim of the study has been to trial approaches to maximising response within groups often underrepresented in surveys of this nature – specifically, children who are 'looked after' or otherwise deemed vulnerable, those from lower income households, and those from ethnic minority backgrounds.

Now in its final stages, the SEND Futures Discovery Phase study has collected data from or about more than 3,800 young people with SEND. This presentation will set out key learnings from the initial stages of the study.

TALK 4: The Influence of School-Related Stress on School Grades in Early Adolescence: A Genetically Sensitive Approach

Presenter: Lena Weigel, Bielefeld University

Co-authors: Mirko Ruks, Bielefeld University; Alexandra Starr, University of York

Adolescents' academic achievement is influenced by a variety of factors, among them stressful experiences in the school environment. How students deal with stressful experiences at school shapes them in their further development and can have an impact on their academic achievement and thus their educational success, shaping their life course significantly. However, the effect of school stress on achievement may be confounded by unobserved social and genetic factors. Using data from the German TwinLife study (1,472 twins at age 13), we estimate biometric ACE-beta models that allow to estimate the effect of school-related stress on school grades in German and mathematics while controlling for genetic and environmental confounding. Our analysis shows that the significant negative effect of experienced school stress on both German and math grades disappears once genetic confounding is controlled for. Thus, instead of school stress causing poor academic achievement, our results indicate a genetic predisposition that influences the experience of school stress and also has a negative effect on German and math grades. Finding no direct phenotypic effect of school stress on school grades when controlling for genetic confounders demonstrates the relevance of behavioural genetic analyses to research on educational inequality. This finding implies that interventions with regard to educational inequalities may need to be applied at a more individual characteristic level.

TALK 5: Longitudinal Course and Covariates of Mental Health and Burnout During Medical School

Presenter: Valerie Carrard, University of Lausanne

Co-authors: Céline Bourquin, Sylvie Berney, Setareh Ranjbar, Jacques Gaume, Pierre-Alexandre Bart, Martin Preisig, Marianne Schmid Mast, Alexandre Berney, University of Lausanne; Katja Schlegel, University of Bern

Background: Medical School is particularly stressful and medical students usually experience lower mental health and greater burnout compared to same-age population. More longitudinal studies exploring conjointly different aspects of mental health and burnout during medical school are still needed to offer a broader picture of their course and covariates. The present study aims to describe the longitudinal course of medical students' mental health and burnout during medical school using a wide range of indicators and covariates. Method: Yearly questionnaires were sent to all students from curriculum year 1 to 6 at the Lausanne University Medical School (Switzerland). Depression, suicidal ideation, anxiety, stress, and burnout (emotional exhaustion, cynicism, and academic efficacy) were measured using validated questionnaires. Longitudinal course was analysed with linear mixed models including different biopsychosocial covariates: sex, BMI, physical activity, satisfaction with health, psychotherapist consultation, coping strategies, partnership status, social support, parents' education, and hours in paid job. Results: In total, 1595 students (67.9% female) filled in at least one of the yearly questionnaires. At the time of this abstract submission, analyses for depression were completed. Results showed that depression significantly decreased between the first and sixth year of medical school (Beta=-0.69, CI=-0.89;-0.49, p<.001, R2=.55) with the first two years being the most critical followed by a significant improvement (Mdiff= 1.44, SD=0.51, Z=2.83, p=.024). Lower depression was related to being male, more physical activities, more satisfaction with health, less psychotherapist consultation, less emotional and more help-seeking coping strategies, and more social support. Conclusion: Depression is significantly higher during the first two years of medical school and then decreases in later years. Our study confirms that physical activities, coping strategies, and social support mitigate the mental health burden of medical students. Analyses for suicidal ideation, anxiety, stress, and burnout are in progress and will be presented at the conference.

KEYNOTE PRESENTATION 3

Making the Transition to Adulthood in Times of Social Change: Challenges and Opportunities

Presenter: Ingrid Schoon, UCL Institute of Education

Making the transition to adulthood is a key developmental task for young people. In this paper I will address key challenges and opportunities facing young people coming of age in different historical periods, i.e., before and after the turn of the Millennium, following the 2008 recession and the 2020 global Covid-19 pandemic. The focus lies in particular on experiences of social inequality across multiple domains such as education, employment and housing and associated levels of health and wellbeing. Adopting a lifecourse perspective I will discuss the interlinkages of multiple inequalities, the interactions between social and individual-level resources and what can be done to support young people in times of social change.

DAY 3 Wednesday 11th October 2023

8A SYMPOSIUM

School-to-Work Transitions in Times of Global Upheaval

Convenor: Ingrid Schoon, UCL Institute of Education

The transition from school to work is a major developmental task for young people who have to navigate changing education and labour market opportunities, a task which became especially challenging in the aftermath of the Covid-19 pandemic. This symposium brings together 4 studies from the UK, Germany and Ireland examining pandemic effects on the future orientations of young people and uncertainties they faced in their education and career transitions. The first study by Stefan Hofherr and colleague is based on the 'Growing up in Germany' study examining variations in the school-to-work transitions and their association to wellbeing and career orientation. The second study by Golo Henseke asks if schools can support career preparations of students in times of economic upheaval that followed the pandemic. The study confirms the potential positive contribution of work-based employer engagement organised by schools for young people's ability to navigate an uncertain job market. The second study by Hans Dietrich and colleagues compares career expectations of young people in Germany and the UK, and how young people's career concerns are shaped by social status. The study finds that the while in the UK career concerns where especially affected for young people from less privileged background, this was not the case in Germany. The third study by Ryan Alberto Gibbons and Jennifer Symonds is based on the Growing Up in Ireland study and shows that both educational and economic adversity negatively impacted young people's future optimism, but that social support and self-control can mitigate against the negative effect of economic adversity but not against educational adversity. The findings will be discussed by Emer Smyth, who will reflect on the interactions between social and individual resources in times of upheaval.

TALK 1: Changes in the Life Course and Career Perspectives Among Youth and Young Adults During the COVID-19 Pandemic in Germany

Presenter: Stefan Hofherr, German Youth Institute (DJI)

Co-authors: Birgit Reißig, Christine Steiner, Sabine Walper, German Youth Institute (DJI)

Many studies have drawn attention to the impact of the COVID-19 pandemic and related containment measures on the social and psychological wellbeing of young people as well as their learning opportunities and educational outcomes (Betthäuser et al., 2023; Racine et al., 2021). Contact restrictions and distance learning in schools, vocational training, and in universities have been pointed out as major risk factors for compromised wellbeing and limited learning outcomes. Although those who left school evidenced improved wellbeing, some data indicate that adolescents tended to prolong their schooling instead of starting vocational training, university studies, or enter the labor market, be it due to insufficient achievements after school learning during the Covid-pandemic or due to insecurities about their future prospects (Sandner et al. 2022).

Given that Germany had about 10 months of lockdown between March 2020 and May 2021, effects are likely to be particularly pronounced in this country. Our research addresses different paths in the school-to-work transition as young people entered the pandemic (2019 – 2021) and aims to link these to their trajectories of wellbeing (satisfaction with current school/tertiary education/employment and long-term occupational perspectives) and career orientation. Our analyses are based on longitudinal data of 1,418 respondents aged 12 to 19 years (T1) (48% female, 25% migrants) who participated in the nationwide survey "Growing up in Germany", conducted by the German Youth Institute in 2019 and 2021.

Results show that the satisfaction with the current situation in school/vocational training/studies/occupation and the satisfaction with the long-term occupational perspectives decreased between 2019 and 2021. Random-effects panel data regressions show that the amount of distance learning due to COVID-19 is negatively associated with the satisfaction with the current situation, while a school-to-work-transition event between 2019 and 2021 is uncorrelated. Among demographics, age is negatively, and the highest parents' socio-economic index (HISEI) positively correlated.

TALK 2: Can Schools Support Career Preparation? Experiences of Young People in the Aftermath of the Covid-19 Pandemic

Presenter: Golo Henseke, UCL Institute of Education

Co-author: Ingrid Schoon, UCL Institute of Education

Using a novel, nationally representative longitudinal survey data of young people aged 16-25 collected between May-21 and Nov-22 (n = 7,000 from up to 4,831 young people), the current study adds to the literature on school-mediated employer engagement.

Previous research has shown that employer engagement in secondary education can be a valuable resource in the transition to work with potential interactions with prior skills, knowledge and attitudes. For this reason, English policymakers have put measures in place to raise the number of meaningful school-mediated encounters with employers that pupils experience during their secondary education. However, the evidence base for the efficacy of employer engagement is relatively slim.

This study makes three contributions to strengthen the evidence base and narrow knowledge gaps. Firstly, it examines sociodemographic and geographic inequalities in employer engagement in secondary education across the UK. Secondly, it tests the effect of employer engagement on the school-to-work transition during rapid economic recovery after the initial COVID-19 shock. Finally, it tests the efficacy of additional school-based careers information, advice and guidance during the pandemic in raising pupils' job skills learning and participation in work experiences.

First findings document that:

- 1. The experience of employer engagement continues to be uneven in the UK;
- 2. Work-based but not school-based employer engagement was a vital resource that young people could mobilise in the transition from education to work specifically towards high-level roles; and
- 3. Those education providers that offered additional career support during the pandemic raised their students' participation in work experiences and online job skills learning and narrowed perceived learning loss related to the pandemic.

Overall, the results confirm the potential positive contribution of work-based employer engagement for young people's ability to manage in uncertain job markets.

TALK 3: Young People's Career Expectations in Times of (Declining) Uncertainty in Germany and UK: The Pandemic Effect

Presenter: Hans Dietrich, Institute for Employment Research (IAB)

Co-authors: Golo Henseke, Alexander Patzina, Ingrid Schoon, Laura Brunner, UCL Institute of Education

The COVID-19-pandemic severely affected the life situation of young people in manifold ways (school closure, reduction of training opportunities and an above average increase of youth unemployment and especially of long-term unemployment in the youth age). This study asks, how young people aged 16-25 years in Germany and the UK respond to that specific period with respect to their expectations regarding their educational and labour market opportunities. More specifically, we are interested in how individuals' educational and work-related future expectations develop in the turn of the COVID19-pandemic with respect to career concerns and the progression of their job-related skills, and to what extent young people's career concerns are shaped by social status.

The study uses individual-level data from the British and German Youth Economic Health Monitor (YEAH) survey, collected in 6 quarterly waves between January 2021 and June 2022. The British dataset includes 6000 observations from 3,746 individuals, whilst the German survey delivered 1,800 observations of young individuals. We analysed the data county-specific in a comparative way and applied a difference in differences approach.

In core, the future expectations of youths at risk (being at threat of unemployment or beeng unemployed) within the school to wok transition got affected most by the COVID-19 pandemic, however they adapted over the turn of the pandemic. The study examines the associations between career concerns and socio-economic status (indicated by parental education and social class (in the UK we used parental education and free school meals) and the young person's own economic activity (in education, employment, training, or NEET) and changes throughout the pandemic in the two countries. We find that young people at the cusp of making the school-to-work transitions were most worried about their careers and skill development. While in the UK these concerns are especially marked among young people from less privileged background, this is not the case in Germany.

TALK 4: Young Adult Optimism for the Future: The Impact of COVID-19 Pandemic Job Loss and Educational Disruption

Presenter: Ryan Alberto Gibbons, University College Dublin

Co-author: Jennifer E. Symonds, University College Dublin

The COVID-19 pandemic created severe disruptions for young adults in education and employment. In this study we take a risk and resilience perspective on how disrupted education and job loss impacted young adults' optimism towards the future, considering the roles of prior adversity (e.g., death of close friend or relation), self-control (individuals' ability to self-regulate emotions, thoughts and impulses) and social supports (access to supportive relationships). Using longitudinal data from the Growing Up in Ireland study (N = 1,838; female = 63%; $M_{\rm age} = 22$), we utilised hierarchical linear models to estimate the effects of educational adversity (heavily disrupted higher and further education) and economic adversity (loss of employment) on young adults' optimism for the future. Two groups of young adults were modelled: those in full time employment and those in third level education. Both educational and economic adversity were observed to hold strong negative associations with future optimism. However, adjusting for self-control and social support mitigated against some of the effect of educational adversity, and fully accounted for the effect of economic adversity. Prior experience of adversity had no statistically significant association with future optimism in either model and did not moderate the association between self-control and social supports on optimism. SES has no independent association with optimism and did not moderate any of the other associations. Findings indicate that social supports and self-control can mitigate against the negative effect of economic adversity net of SES, potentially as respondents may feel they have more agency to affect outcomes in this regard (e.g., find a new job), but that educational adversity effects remain, net of social supports and self-control.

8B SYMPOSIUM

Social Inequalities in Mental Health and Wellbeing Across the Lifecourse

Convenor: Gemma Knowles, King's College London

This symposium showcases longitudinal, cross-cohort, and comparative work by early career researchers working at, or in partnership with, the ESRC Centre for Society and Mental Health, King's College London. The data presented are from three population-based cohorts: the Tokyo Teen Cohort (TTC), the Resilience Ethnicity and AdolesCent Mental Health (REACH) study, and the 1970 British Cohort Study. Collectively, our work explores the influence of social and structural contexts and conditions on mental health trajectories across the lifecourse. Paper 1 examines gender inequalities in life satisfaction before and during the covid-19 pandemic. Paper 2 explores racial inequalities in the use of school exclusions and the impacts on subsequent mental health trajectories. Paper 3 explores the context-dependent nature of gender inequalities in adolescent mental health. Paper 4 investigates the age of onset of inequalities in depressive symptoms between LGBTQ+ and non-LGBTQ+ youth in diverse communities in inner-London and in inner-city Tokyo.

TALK 1: Gender Inequalities in the Disruption of Long-Term Life Satisfaction Trajectories During COVID-19

Presenter: Darío Moreno-Agostino, King's College London

Co-authors: Jayati Das-Munshi, King's College London; George B. Ploubidis, University College London

Background: Evidence suggests that women's mental health has been disproportionately impacted by the COVID-19 pandemic. Time-use differences have been hypothesised as an explanatory factor, as women generally spent more time than men on psychologically taxing activities.

Methods: We used data on life satisfaction spanning 25 years (1996-2021, age 26-51) from the 1970 British Cohort Study, a birth cohort representing adults born in Britain in 1970 (n = 6,766). We used piecewise latent growth curve models to study gender differences in the long-term trajectories of life satisfaction (range 0-10, with higher scores meaning higher life satisfaction) and in the impact of the pandemic onset on these trajectories, and whether time-use differences partly explained that differential impact.

Results: Women had consistently higher life satisfaction levels prior to the pandemic (Δ intercept,unadjusted = 0.204 [95% CI: 0.073, 0.336], p = .002), and then experienced a more accelerated decline with its onset (Δ quad2,unadjusted = -0.019 [-0.026, -0.011], p < .001). The more accelerated decline in women was slightly less pronounced after accounting for the time use variables (Δ quad2, adjusted = -0.016 [-0.031, -0.001], p = .037). Nevertheless, time spent working was positively related to life satisfaction in women but negatively in men (Δ working1-8h = 0.561 [-0.198, 0.925], p = .002; Δ working>8h = 0.587 [0.186, 0.987]; p = .004), whereas time spent doing housework was negatively related to life satisfaction in women but positively in men (Δ housework1h = -0.492 [-0.879, -0.105], p = .013). Results were robust to adjustment for the concurrent financial situation.

Discussion: Our study shows gender inequalities in the impact of the pandemic on the long-term life satisfaction trajectories of adults in their 50s and suggests that time-use differences do not explain these inequalities. Further research on the mechanisms underlying the differential impact of the pandemic across genders in positive mental health is needed.

TALK 2: Food Bank Use and Mental Health Outcomes in the UK: A Fixed Effects Longitudinal Analysis

Presenter: Marina Kousta, King's College London

Food insecurity is associated to poorer mental health, particularly common mental disorders (CMDs), but the underlying causal pathways are complex and not well-understood. Findings from (largely qualitative) studies investigating food bank use on mental health are mixed, showing that food banks can either worsen mental health through feelings of shame and stigma, or they can be protective of mental health by providing short-term relief. For this reason, we wanted to assess the effects of food bank use on mental health outcomes using longitudinal quantitative panel data. Employing five waves of the Understanding Society Covid-19 Survey we used a linear fixed effects regression to examine the influence of food bank use as the (binary) independent variable on GHQ-12 which measured psychological distress as the main (continuous) outcome. Covariates included time-varying characteristics; namely, equivalised household income, cohabitation with partner, clinical vulnerability to Covid-19, employment status and ability to pay bills, as these could influence both food bank usage and mental health. Preliminary results indicate that using a food bank can have a negative effect on psychological distress, thus deteriorating mental health. Our findings suggest that more stringent measures should be adopted to aid populations facing food poverty in the UK, as current support stems almost exclusively from third sector sources such as food banks which could further contribute to poor mental health outcomes.

TALK 3: Gender Inequalities in Depressive Symptom Trajectories Among Young People in London and Tokyo: A Longitudinal Cross-Cohort Study

Presenter: Gemma Knowles, King's College London

Co-authors: Daniel Stanyon, Syudo Yamasaki, Kaori Endo, Charlotte Gayer-Anderson, Mitsuhiro Miyashita, Satoshi Usami, Kaori Baba, Junko Niimura, Naomi Nakajima, Thai-sha Richards, Jonas Kitisu, Adna Hashi, Karima Shyan Clement-Gbede, Niiokani Tettey, Samantha Davis, Katie Lowis, Verity Buckley, Dario Moreno-Agostino, Charlotte Woodhead, Jacqui Dyer, Katherine M. Keyes, Shuntaro Ando, Kiyoto Kasai, Craig Morgan, Atsushi Nishida, King's College London

Background: A growing body of evidence suggests gender inequalities in mental health are context dependent and, by extension, potentially preventable through social and structural change. However, most of the evidence is cross-sectional, relates to adults and, importantly, fails to account for possible measurement non-equivalence across contexts and groups. We tested the hypothesis that inequalities in trajectories of depressive symptoms between adolescent boys and girls are larger in London than in Tokyo – and not due to incomparable measurement.

Methods: We analysed three waves of data from representative adolescent cohorts in Tokyo (the Tokyo Teen Cohort; n, 2813) and London (Resilience, Ethnicity and AdolesCent Mental Health; n, 4287) (n, 7100). We used multigroup and longitudinal confirmatory factor analysis to examine measurement invariance of the 13-item self-report Short Mood and Feelings Questionnaire (SMFQ) across cohorts, genders, and ages. We used latent growth curve models to estimate and compare depressive symptom trajectories from age 11 to 16 years in boys and girls in Tokyo and London.

Results: Scalar invariance of the SMFQ was well supported. In London, gender inequalities in depressive symptoms were evident at age 11 (0.8 [95% CI: 0.3, 1.2] points higher in girls); in Tokyo, the disparity emerged between ages 11 and 14. In both cohorts, the disparity between boys and girls widened year-on-year but, by age 16, was around twice as large in London than in Tokyo, reflecting particularly steep rates of increase among girls in London (1.1 [0.9, 1.3] points per year) compared with girls in Tokyo (0.3 [0.2, 0.4] points per year) (interaction, p<0.001).

Interpretation: Gender inequalities in depressive symptoms during adolescence are context dependent. There is an urgent need to understand the social and structural conditions that cause and exacerbate—and those that prevent and mitigate—gender inequalities in mental health.

TALK 4: Depressive Symptom Trajectories Among LGBTQ+ Youth in Tokyo and London

Presenter: Daniel Stanyon, Tokyo Metropolitan Institute of Medical Sciences

Co-authors: Gemma Knowles, Atsushi Nishida, Craig Morgan, Syudo Yamasaki, Charlotte Gayer-Anderson, Kaori Endo, Satoshi Usami, Mitsuhiro Miyashita, Samantha Davis, Junko Niimura, Katie Lowis, Kaori Baba, Naomi Nakajima, Thai-sha Richards, Jonas Kitisu, Adna Hashi, Karima Shyan, Clement-Gbede, Niiokani Tettey, Shuntaro Ando, Kiyoto Kasai, Charlotte Woodhead, King's College London

Background: Mental health problems are considerably more common among sexual and gender minority (LGBTQ+) youth compared with their peers. However, most of the evidence is cross-sectional and relates to older adolescents/young adults (~16-24 years) and majority-White communities. Little is known about (a) the age at which these mental health inequalities emerge (and the point at which they may, then, be preventable), and (b) the mental health trajectories of LGBTQ+ youth in diverse communities and across societies with – based on formal metrics – varying levels of progress toward inclusion and equity for LGBTQ+ communities.

Methods: We analysed three waves of data from community-based cohorts of young people in Tokyo (the Tokyo Teen Cohort; n, 2,318) and London (Resilience, Ethnicity and AdolesCent Mental Health; n, 1445, 80% minoritised ethnic groups). We used latent growth curve models to estimate and compare trajectories of depressive symptoms (scores derived from the self-report Short Mood and Feelings Questionnaire [SMFQ]) from age 11 to 16 years in LGBTQ+ and non-LGBTQ+ youth in Tokyo and London.

Results: In London, mean depressive symptoms at age 11 (i.e., intercept) were around 3.0 points higher (95% CI: 1.8, 4.3) and mean rate of increase (i.e., slope) around 0.8 points higher (95% CI: 0.3, 1.4) in LGBTQ+ vs. non-LGBTQ+ youth. In Tokyo, the mean intercept was around 2.1 points higher (95% CI: 1.3, 2.9) and mean rate of change around 0.6 points higher (95% CI: 0.3, 0.9) in LGBTQ+ youth. We found no evidence to suggest the magnitude of inequality varied across contexts (sexuality*cohort interaction: intercept, p=0.253; slope, p=0.468).

Interpretation: Inequalities in depressive symptoms between LGBTQ+ and non-LGBTQ+ youth emerge early in the lifecourse – before age 11 – and worsen through adolescence. The magnitude of the disparity by age 11 is striking and requires greater attention in research and policy.

8C SYMPOSIUM

Refugee Integration: Insights from Refugee Cohorts in Germany and Australia

Chair: John van Kooy, Australian Institute of Family Studies (Convenor: Ben Edwards, ANU)

This symposium features five papers from the SLLS Refugee across the life course interest group. The first paper by Zinn and Grabka focuses on the wellbeing of refugees from the Refugees from Ukraine in Germany cohort. The second paper by Kosyakova, Ette, Brücker and Schwanhäuse explores the degree to which the intensity of conflict in the Ukraine-Russian war effects settlement intentions. Gundacker, Kosyakova and Trubswetter then examines. how integration trajectories of Ukrainian refugees in Germany are influenced by individual and contextual resources. Rioseco and van Kooy examine English language and employment integration trajectories in a refugee cohort in Australia. Finally, Reissner and Dietrich examine how labour market integration of Syrian refugees in Germany is influenced by PTSD, depression and anxiety.

TALK 1: The Effect of Conflict Intensity on Refugees' Settlement Intentions Under Uncertainty

Presenter: Yuliya Kosyakova, Institute for Employment Research (IAB)

Co-authors: Andreas Ette, Federal Institute for Population Research; Herbert Brücker, Silvia Schwanhäuser, Institute for Employment Research (IAB)

Settlement intentions are critical in determining refugees' future life course, influencing decisions about human capital investments, labor market participation, and social integration. Previous research has primarily focused on voluntary migrants' settlement intentions, examining the economic and socio-cultural factors that affects temporary migration. This study focuses on forced migration of Ukrainian refugees following Russia's invasion of Ukraine in February 2022. While similar factors also affect refugees' settlement intentions, rapidly changing conditions in their home countries, such as conflict intensity, may have an additional impact. Against this background, we investigate whether higher conflict intensity is linked to lower return intentions among refugees due to long-term reductions in security, deteriorating economic and social living conditions, and increased levels of anxiety and stress. We use large-scale survey data on Ukrainian refugees in Germany linked with data on time-varying conflict intensity in refugees' home regions before the survey participation. We find that the greater the number of conflict-induced fatalities in the period before the interview, the more likely refugees are to intend to settle in Germany, and this relationship is robust to various model specifications. Extending the model to account for uncertainty about the outcome and duration of the war in Ukraine, implies that the conflict intensity particularly reduces the uncertainty of the decision to stay in Germany instead of returning to Ukraine. In other words, the more intense the conflict situation, the more certain the refugee is to stay in Germany. This research has important policy implications for refugees' settlement and return intentions.

TALK 2: How Individual and Contextual Resources Shape Refugees' Integration Trajectories: Evidence from a Sequence Analysis in Germany

Presenter: Lidwina Gundacker, Institute for Employment Research (IAB)

Co-authors: Yuliya Kosyakova, Parvati Trübswetter, Institute for Employment Research (IAB)

Taking a life course perspective, this paper explores the complexity of refugees' integration trajectories and reassesses the importance of personal and contextual resources. We account for multidimensional aspects of integration related to refugees' legal status clarification, their participation in integration measures, job search and employment. We draw on rich representative survey data of recent refugees in Germany linked to administrative data and macro data on refugees' initial county of residence to examine their holistic integration trajectories in the first three years after settlement. We use sequence analysis to identify clusters of integration trajectories. In multinomial logistic regressions we explore how these clusters are related to personal resources and the local labor market conditions refugees are exposed to. We identify five typical integration trajectories of refugees in Germany. While some refugees follow a rather straight-line trajectory of course participation and job search into employment, other biographies are characterized by long education phases or periods of inactivity. Women, less educated and older refugees are less likely than other groups to follow the straight-line trajectory. We furthermore establish that refugees residing in counties with a lower unemployment or a higher share of employment in the service sector have a higher likelihood to enter the straight-line trajectory. We conclude that the consideration of local conditions in the allocation of refugees may improve their early integration outcomes.

TALK 3: Trajectories of Refugee Integration: Evidence from the Building a New Life in Australia Study

Presenter: John van Kooy, Australian Institute of Family Studies

Co-author: Pilar Rioseco, Australian Institute of Family Studies

A life-course perspective suggests that refugee 'integration' in host societies be conceptualised not as a set of predefined indicators that improve over time for all migrants, but rather as individualised pathways likely to be heterogenous and contingent on personal attributes, biographical events, access to resources, and interactions with the host community. Modelling these dynamics is important for understanding and responding to this heterogeneity.

The present analysis used data from Building a New Life in Australia, a longitudinal study of humanitarian migrants (n=2,399). Using Mplus to specify growth mixture models (GMM) and latent class growth analysis (LCGA), we estimated trajectories of self-assessed English skills and employment, respectively, over five waves of the study for refugees aged 18-64. A five-class solution was estimated for English skills. Two classes showed significant improvement; the smaller group (7%) showed a large improvement, while a second larger class (32%) showed a small improvement. All other classes—in which women and older refugees were over-represented—showed either no improvement in English scores, or a steeper decline over time.

For employment, a four-class solution was obtained. The largest class included respondents not in paid work across waves (72%). The remaining three classes showed distinct trajectories: progressive entry into employment, early entry (followed by exit) from employment, or delayed entry (slower to enter employment in earlier waves). Each of the in-work classes were overwhelmingly male, with some pre-migration work experience and higher education levels.

The divergence in post-migration trajectories shown above suggests that there are distinct refugee subgroups for whom 'integration' proceeds differently than what is represented by conventional language and employment constructs. Moreover, there are clear demographic and pre-migration characteristics associated with trajectories over time. This raises the policy question of whether some humanitarian migrants require differentiated and more targeted support to foster social participation and economic security.

TALK 4: The Interrelation of PTSD, Anxiousness and Depression and the Labor Market Integration of Young Syrian Refugees in Germany from a Longitudinal Perspective

Presenter: Volker Reissner, University of Duisberg-Essen

Co-authors: Hans Dietrich, Institute for Employment Research (IAB)

From a longitudinal perspective, this paper sheds light on the development of PTSD (PTSD trajectories) with respect to possible comorbidity-effects of anxiousness and depression, and labor market position of young Syrian civil war refugees in Germany. As the majority of the Syrian civil war refugees experienced violence in various ways, this paper addresses the interrelation of PTSD, anxiousness and depression, and individual's labor market position in Germany from a longitudinal perspective. We employ unique survey data, including 2.732 young Syrian refugees, who were interviewed for a first time in 2016, immediately after they received clearance to enter the German labor-market and later followed up in 2018 and 2021 with repeated measures of mental health, and the progress of the integration into the German society. The survey data are perfectly matched with register data, which document the labor market status of the respondents from 2016 to 2020 more in detail, including employment experience (including level and type of occupation but also income) but also experience of job-search and unemployment or trainingactivities. Regression models and structural equation models (SEM) are applied to explore the interaction of PTSD, anxiousness and depression and labor market position for the period of 2016 to 2021. We are especially focused on both the effects of mental health (and possible comorbidity effects with anxiousness and depression; see Oh et al 2016) on the labor market integration and the reversed effect of labor market experience on the progression of mental health. This relates to the literature on PTSD trajectories, which indicates the complexity of PTSD pattern over the life course (Solomon & Mikulincer 2006; Santiago et al., 2013; Solomon et al., 2021). First empirical results confirm the complexity assumption of PTSD trajectories, possible effects of comorbidity and the ambivalent effects of labor market integration on PTSD trajectories.

8D INDIVIDUAL PAPERS (HEALTH - COVID)

TALK 1: Analyzing Gender Differences in the Interrelationships Among Young Schoolchildren's School Connectedness, Daily Activities, and Emotional Wellbeing During the Pandemic Lockdown

Presenter: Peiyi Lin, National Taiwan Normal University

Co-authors: Chien-Ju Chang, National Taiwan Normal University; Shu-Hui Hsieh, Academia Sinica; Miao-Ju Tu, Fu Jen Catholic

University

Introduction: Studies on COVID-19-related school closures found that school connectedness was positively correlated with mental wellbeing; however, they focused on adolescents and did not find consistent gender differences. This study investigated the extent to which young schoolboys' and girls' school connectedness contributed to their choice of daily activities and subsequently emotional states.

Method: A total of 941 first and second graders in Taiwan— gender ratio at 1:1 approximately—completed a web-based questionnaire, adapted from an international COVID-19 survey for children. Exploratory factor analysis of the 18 Likert-scale items suggested five factors: school connectedness, regular and digital activities, positive and negative affect.

Results: The fit statistics of a multi-group structural equation model (SEM) controlling for pre-pandemic satisfaction showed a good fit, χ^2 = 753.813, df = 316, χ^2 /df = 2.385, p < .001, RMSEA = .054 (90% CI: .049 - .059), CFI = .858, SRMR = .070. The findings suggested the presence of gender differences: (1) There was sufficient statistical evidence that higher level of school connectedness was linked with higher level of regular activities for girls (\mathbb{Z} = .137, p = .048, p < .05). (2) There was limited evidence that higher level of regular activities was associated with lower level of negative affect for girls (\mathbb{Z} = -.154, p = .063, p < .10) and that higher level of digital activities was correlated with higher level of negative affect for boys (\mathbb{Z} = .174, p = .064, p < .10).

Conclusion: The study contributed to current research in two ways. First, it focused on first and second graders that were previously underrepresented. Second, it revealed that the interrelationships among school connectedness, lockdown daily activities and emotional wellbeing were not the same for boys as they were for girls. The findings have implications for activity planning during extended school closures.

TALK 2: Are Changes in Trust in Government During the COVID-19 Pandemic Associated with Where You Live, Your Generation and How You Vote? An Investigation Comparing Samples of 'Baby Boomers' and 'Generation X' from the CLS COVID-19 Web Survey Across Two National Longitudinal Studies During 2020-2021

Presenter: Richard Wiggins, University College London Co-author: Samantha Parsons, University College London

This paper focuses on changes in self-reported trust in the British Conservative government during the COVID-19 pandemic, over three time-points between May 2020 - February 2021, and how the government's handling of the pandemic was evaluated by two generations of British adults. Study members belong to the 1958 and 1970 longitudinal birth cohort studies, representing the 'baby boomers' (sixty-something's) and 'Generation X' (fiftysomething's). We examine variability in trust and handling of the pandemic scores across these two generations and the three British countries of England, Scotland and Wales, in the context of earlier trust scores, socio-demographic status, living arrangements, labour market position, social contact, expressions of loneliness, vaccine hesitancy and support for the Conservative party as measured by voting for them in General elections between 1997 – 2010. Our regression analyses suggest that prior voting behaviour has a strong relationship with trust at each point of data collection with country differences persisting for Scotland but not Wales. In terms of generational differences, in the older 'baby boomer' cohort women are consistently more positive than men and degree educated cohort members are consistently more negative in their expression of trust in government, but these differences are not found in Generation X. Turning to the evaluation of the government's handling of the pandemic the emphasis of our interpretation changes to the extent that prior party political support for the Conservatives results in a positive endorsement of the government for both cohorts and there is little statistical evidence for country wide differences or any negative influence of vaccine hesitancy. Interestingly, the cohort differences are similar for trust in wave 3. Baby boomer women are positive about the government's handling of the pandemic and those with a degree remain negative in their evaluation.

TALK 3: LGBT Mental Health in the First Year of COVID

Presenter: Cara Booker, University of Essex

Background: The COVID pandemic impacted most individual both physically and mentally, however certain groups may have been impacted more than others. Individuals who are LGBT+ have experiences not shared by heterosexual individuals, they also experience increased health inequalities compared to heterosexuals. In this paper we explore differences in mental health levels between individuals of different sexual orientations and the factors that impact those differences.

Data: We use the COVID-19 surveys of the Understanding Society: the UK Household Longitudinal Study (UKHLS) that were collected between April 2020 and September 2021 from over 19,000 individuals.

Methods: We use random effects models to explore the changes in mental health, as measured by the GHQ-12 and loneliness, amongst different sexual orientation groups over the first year and a half of the COVID-19 pandemic. Results: Individual who identified a sexual minority had worse GHQ-12 scores and were lonelier over the first 18 months of the COVID-19 pandemic compared to heterosexual individuals. We also explore age, regional and household composition differences between these groups.

Conclusions: Sexual minorities experienced larger impacts to their mental health and levels of loneliness during the COVID-19 pandemic compared to heterosexuals. These impacts are likely to be long-lasting and have implications for future policy and outreach efforts.

TALK 4: Examining the Diversity of Labour and Socio-Economic Experiences for Young Adults in Australia During the COVID-19 Crisis

Presenter: Hernan Cuervo, University of Melbourne

The COVID-19 crisis has brought to sharp relief the precarious employment situation of young people and young adults in Australia. Scholarly and public debate around the impact of the pandemic revolved about an unprecedented crisis that created a deep disruption of life. In this paper I focus on employment and socio-economic conditions and consider if conditions of precarity for young adults in Australia are fundamentally a consequence of the pandemic or if they precede this socio-historical event. To interrogate this, I draw on longitudinal data from a research project tracking the transition to adulthood of young Australians since 2005. I examine approximately 1,800 open-text comments from surveys from 2016 (participants aged 28) to 2022 (participants aged 34). I draw on the concept of liminality to analyse the labour patterns for this group of young adults for this period. While I acknowledge the impact of COVID-19 on young adults' life, data points out to a variety of labour and socioeconomic experiences for participants in COVID-19 period (2020-2021), some of which precede the pandemic crisis. Ultimately, I contend that the tendency in research to depict contemporary events as binging "new" crises for young people obscures the deeper structural arrangements that continually position the young to take the brunt of social and economic policies. Further, it also neglects the diversity of experiences at the interior of a cohort, including deep-seated inequalities, which are often shaped by social structures and institutional and policy arrangements.

8E INDIVIDUAL PAPERS (PARENT AND CHILD HEALTH)

TALK 1: Changes of Nutritional State and Eating Patterns: A Cohort Study in Uruguay

Presenter: Cecilia Severi, Universidad de la República Co-author: Guadalupe Herrera, Universidad de la República

Overweight and obesity are one of Public Health problems nowadays. In urban contexts the problem is more severe because obesogenic life habits. In the case of children prevalence is increasing in Uruguay like high- and -medium income countries, reaching 12% to 25% of overweight. The early onset of overweight is associated with greater weight retention in later life, as well as how eating habits tend to last. This study has the objective to evaluate eating patterns and their effect over the nutritional state in two moments of a cohort study which started in 2013 with a national representative sample which was of 2383 children of 6 to 47 months of age. Second wave was in 2016. This research evaluated changes of nutritional state from one to second wave and eating habits associated. Feeding patterns were built through cluster analysis using the hierarchical method of the Partitioning Around Medoids algorithm and subsequently its effects on three nutritional status outcomes were estimated based on a theoretical model using multinomial logistic models. Analysis was done separately in two age groups: 3 to 5 eating habits were built identifying one healthier and more other with ultra processed. The effect of eating pattern increased the probability of overweight and obesity of more than 10 percentile points with a synergic between eating patterns in both waves. In conclusion, eating patterns in early childhood begin to show impact in nutritional state, even before school age.

TALK 2: The Effect of Early Parenthood on Affective Symptoms: Evidence from Two British Birth Cohorts

Presenter: Darya Gaysina, University of Sussex

Co-authors: Shannon Murphy, Susie Muszynska, Alexandra Schmidt, Wezi Mhango, University of Sussex

Background: Early age at first childbirth can affect parents' mental health, eliciting affective symptoms (i.e., symptoms of depression and anxiety). Available evidence fails to consider the importance of life course effects and cohort effects in these associations. The present study aimed to investigate whether early age of becoming a parent (16-19 and 20-23) was a risk factor for developing affective symptoms in both men and women in early adulthood across two generations born 12 years apart.

Method: The study used secondary data from two British birth cohorts - National Child Development Study (NCDS, born in 1958) and in British Cohort Study 1970 (BCS70, born in 1970). Multiple bivariate logistic regressions were used to test for the effect of early parenthood on affective symptoms in young adults (age 23 in NCDS, and age 26 in BCS70), while also controlling for sociodemographic characteristics (socio-economic status, education level, marital status).

Results: Significant associations between early parenthood and affective symptoms were found in NCDS, but not in BCS70. In NCDS, those with age at first childbirth of 16-19 were at the highest risk of affective symptoms, with sex differences being non-significant. However, marital status moderated the association, so the risk was significantly higher for unmarried women than for married women from the NCDS.

Conclusions: The findings suggest the important role of age of parenthood for mental health and warn of possible cohort effects. The findings can provide guidance into future interventions for parents' mental health.

TALK 3: Changes in Parents' Mental Health Related to Child Out-of-Home Care Placements: A Swedish National Register Study

Presenter: Tanishta Rajesh, Stockholm University

Co-authors: Kenisha Russell Jonsson, Gothenburg University; Josephine Jackisch, Viviane S. Straatmann, Stockholm University Background: Literature on outcomes of children in out-of-home care (OHC) is extensive. However, less is known regarding associations of such placements with parental mental health disorders (MHD).

Objective: This study investigated changes in hospitalization rates due to MHD among parents, four years before and after placement of their child in OHC. Participants and Setting: We used data on 4,067 members (Generation 1) of the RELINK53 cohort (individuals born and living in Sweden in 1953) and their 5,373 children (Generation 2) in OHC.

Methods: Using random effects regression models, associations between OHC and MHD were examined separately for fathers and mothers. Nested models were tested exploring associations with parent and child-/placement-related factors. Marginal effects were computed to assess mean rates of hospitalization annually.

Results: Overall, mothers had higher mean hospitalization rates than fathers. Compared to the year of placement, hospitalization rates were significantly lower in the four years before placement for mothers (9.9%, 9.5%, 10.5%, and 12.1%, respectively) and fathers (5.9%, 7.6%, 8%, and 9.8%, respectively). Mothers showed highest hospitalization rates at the year of placement (26.6%), while fathers, one year after placement (13.4%). Hospitalization rates declined significantly directly after placement among mothers, but an unclear and non-significant pattern of results was found among fathers.

Conclusions: Most parents have higher hospitalization rates at and directly after placement. Potential hypotheses underlying these findings are discussed, including psychosocial gender differences and opportunities to seek care as means of reunification. There is an urgency to develop strategies to better support these parents throughout the process. Keywords: Child welfare services, out-of-home care, parental mental health, cohort study.

TALK 4: Transition to Parenthood and Trajectories of Mental Well-Being During the Life Course

Presenter: Jenna Grundström, Finnish Institute for Health and Welfare

Co-authors: Noora Berg, Olli Kiviruusu, Finnish Institute for Health and Welfare; Hanna Konttinen, University of Helsinki Background: Transition to parenthood is a major life event which can bring long-term changes to parents' mental well-being. Earlier studies have mainly focused on depression and on the relatively short period during and after the transition to parenthood. Present study contributes to this by examining parents' life course trajectories of self-esteem and meaningfulness years before and after the transition to parenthood. The study also examines the differences between parents' and nonparents' mental well-being during the life course. Method: Data from the four follow-up rounds of the "Stress, development and mental health" (TAM) study project from age 22 to 52 years were used in this study. Parenthood year variable was created to indicate years to/from transition to parenthood for each study wave. Measures of mental well-being covered self-esteem (7 items) and meaningfulness (5 items). Models were adjusted for age, relationship status, number of children, and basic education. Results: For women, the trajectories of self-esteem and meaningfulness before parenthood differed significantly from those after the transition to parenthood. For women, there was a significant increase in both self-esteem and meaningfulness before the transition to parenthood. For men, self-esteem decreased significantly after the transition to parenthood. Comparing the mental well-being of parents and nonparents, no differences were found in women's mental well-being. For men, those who were parents, had higher self-esteem and meaningfulness 22-25 years after the transition to parenthood than nonparents at the corresponding age. Conclusion: Transition to parenthood seems to change the earlier positive trajectories of mental well-being to a stable or even decreasing path. However, comparing to nonparents, parents fare well in mental well-being, especially males.

TALK 5: Time Use, Autonomy and Subjective Well-Being of Women with Children After Couple Separation: Longitudinal Evidence for Uruguay

Presenter: Andrea Vigorito, Universidad de la República, Uruguay Co-author: Marisa Bucheli, Universidad de la República, Uruguay

This article provides evidence for Uruguay on the impact of union dissolution (divorce and separation) on a wide set of maternal well-being outcomes in the short run, based on two waves of an official longitudinal study that follows up children that were 0 to 3 years in 2013. To control for the potential selectivity of union dissolution, we carry out a combined PSM- difference-indifference estimation. We find that, for custodial mothers, union dissolution entails, in average, a net per capita household income loss of 16% and a 20% increase in monetary poverty incidence. In line with the gender norms attitudes literature, we find that women increase paid work whereas their unpaid household work falls after separation. Meanwhile, life satisfaction and empowerment are left unchanged. Our findings show that rather than changing their autonomy levels after experiencing a couple split, those women that show more equal gender norms and attitudes and are more empowered are the ones that are more likely to divorce. This research contributes to the existing literature on the effects of union dissolution by providing new quantitative estimations for a developing country.

8F NO PRESENTATIONS

9A SYMPOSIUM

Introducing England's New Panel Studies of Educational Outcomes

Convenors: Line Knudsen, National Centre for Social Research; Susan Morton, University of Technology Sydney
The Educational Outcomes Panel Studies (EOPS) is an exciting new programme of staggered longitudinal panel studies across different phases of education, from the early years through to young adulthood. The programme is funded by The Department for Education (England, UK). The EOPS programme aims to improve our understanding of specific factors that help explain variations in key outcomes, including educational attainment and wellbeing. The studies will combine primary data collection with ambitious plans for linkage with administrative records.

To date, the EOPS series comprises three studies - EOPS A, B and C - which cover the early years through to the post-16 period. The symposium will introduce these first three studies in the series, including the study designs, methodology and data being collected, and plans for the future.

TALK 1: All About Primary Education! Introducing Five to Twelve: A Brand New Panel Study of Primary Education and Outcomes in England

Presenter: Jules Allen, National Centre for Social Research, England

Co-author: Martin Wood, National Centre for Social Research, England

Five to Twelve is a new cohort study exploring education and outcomes in children's primary years. It is the second of the UK Department for Education's Education and Outcomes Panel Studies series and will follow a nationally representative sample of 8,5000 children in England as they progress through primary school.

With a focus on educational inequalities, the study has been designed through a collaboration between the UK National Centre for Social Research, National Children's Bureau and National Foundation for Educational Research. Throughout the four-plus waves of data collection, the study will cover a broad range of topics including pupil behaviours and character, parental background, home environment, mental health and wellbeing, and relationships between parents and children. It will collect information from parents, teachers and about schools, as well as from the children themselves in wave 4. It will also merge in area-level information such as deprivation, environment and crime indicators.

The combination of survey data about families and children from over four time points and linked administrative data from educational and other databases will enable the creation of powerful longitudinal databases. These will be publicly archived and are expected to be widely used for secondary analyses.

This presentation will set out key features of this exciting new cohort study of primary school education, including plans for current and future data collection.

TALK 2: Meet Growing Up in the 2020s: A New Cohort Study of Secondary School Pupils in England

Presenter: Line Knudsen, National Centre for Social Research

Co-author: Maria Tsantani, National Centre for Social Research

Growing Up in the 2020s is the third of the EOPS series of cohort studies and will follow a nationally representative group of approximately 8,500 young people in England as they go through secondary school, and possibly beyond. The study is designed and run by a collaboration of the UK National Centre for Social Research, National Children's Bureau and National Foundation for Educational Research.

With a holistic approach to understanding young people's experiences and views, the study will collect data from young people themselves, their parents or carers, as well as their teacher and their school. These data will be linked to administrative records, ultimately producing a rich resource for analysts and policy makers seeking to understand more about young people's journey through secondary school, and how their experiences – and inequalities embedded within these experiences - influence their outcomes, and their wellbeing.

The first wave of fieldwork will commence in late autumn 2023, with pilot fieldwork undertaken in spring/summer 2023. The presentation will set out key features of this exciting new cohort study of adolescence, including plans for current and future data collection.

TALK 3: Children of the 2020s: An Overview of the Progress of a New Birth Cohort Study of the Early Environ-mental Influences on Children's Early Educational and Socioemotional Outcomes

Presenter: Laurel Fish, University College London

Co-authors: Pasco Fearon, Lisa Calderwood, Alissa Goodman, Marialivia Bernardi, Unversity College London; Sandra Mathers, University of Oxford; Sarah Knibbs, Ipsos MORI

Evidence indicates substantial and growing disparities in educational attainment, and that these inequalities are established very early in children's development. In scientific and policy terms, it is critical to identify malleable risk factors linked to these early inequalities to inform policy and intervention. Children of the 2020s is a new nationally representative longitudinal birth cohort study of families in England, UK, and is a collaboration between University College London, Ipsos, the Universities of Cambridge, Oxford and Birkbeck. It will examine how differences in the early life and home environment influence infant and child developmental competencies, including language, cognition and socio-emotional development. In 2022 8,569 families were recruited into the study when their child was nine months old. These families will be followed annually up to when their child is five years, with face-to-face data collection at nine months (W1) and three years (W3). Non-face-to-face modes will be administered using a sequential mixed mode design using online and telephone surveys when children are aged two (W2), four (W4) and five (W5). The study will include in-home video observations of parent-child interactions, longitudinal data collection using a specialised smartphone app, and innovative assessments of childcare settings at W3 and W4. Primary data collection will be supplemented by record linkage from UK Education and Health records. The talk will present an overview of the study design, methodology, plans for data sharing, and share early findings from W1, including on child health and development, parental wellbeing, and childcare and service use.

9B SYMPOSIUM

Changes in Well-Being of Adolescents, Mothers, and Older Adults in Challenging Times

Convenors: Christine Entleitner-Phleps, Claudia Recksiedler, Alexandra Langmeyer, German Youth Institute (DJI)
This symposium highlights different aspects of well-being in three challenging stages of life, namely in adolescence, as a parent, and in one's second half of life.

First, Gniewosz examines changes in adolescents' well-being, namely perceived loneliness and depressiveness, using data from the German Family Panel throughout the COVID-19 pandemic. Results show that personality factors, rather than aspects related to family relationships, predict changes in well-being during the pandemic. Second, Recksiedler et al. focus on maternal well-being, especially among lone mothers, who may have been particularly burdened during the pandemic. Drawing on panel data from the nationwide survey "Growing up in Germany," analyses indicate that weaker pre-pandemic social support and higher parenting stress were related to positive changes in mental well-being and life satisfaction among lone compared to partnered mothers. Lastly, Loter et al. address sleep quality as another aspect of well-being among older adults based on the cross-national panel SHARE. Results reveal that although improved health behaviors were associated with better sleep quality, experiencing widowhood and life course socioeconomic disadvantage were strong predictors of poorer sleep regardless of individuals' health behaviors. Thönnissen will serve as a discussant to outline the strengths and limitations, overarching themes, and connections across the papers.

TALK 1: Coping with the COVID-19 Pandemic in Adolescence: The Role of Individual and Family Explanatory Factors

Presenter: Gabriela Gniewosz, University of Innsbruck

The COVID-19-pandemic has been a significant life event for adolescents and has been associated with negative changes in wellbeing (Alt, 2021). However, this has not been the case for all adolescents in the same way (Ravens-Sieberer, 2022). While some enjoyed spending more time with their families and felt less stressed, others reported increased family conflicts and feelings of loneliness. Using the German Family Panel with 637 adolescents (Cohort 4, wave 11), latent change score models (Klopack, 2020) are specified to capture the relationship between personal and family variables with the (COVID-19-related) changes in wellbeing. Different forms of changes over time are being modeled here, namely random (change T1-T3) as well as fixed effects (proportional changes T1-T2/T2-T3). This study aims to investigate 1) changes in well-being during the pandemic in adolescents (15-18y), using perceived loneliness and depressiveness, measured over three time points, including one before (Fall/Spring 2018-19) and two after the first pandemic wave (Spring 2020, Fall/Spring 2020-21). Additionally, the study examines 2) the relevance of pre-pandemic family factors (i.e., parent-child intimacy, conflict), and 3) various personality traits (i.e., extraversion, neuroticism), for adolescent well-being. The results show a negative trend in loneliness and depressiveness over time. Furthermore, it is the personality factors rather than family relationship aspects, that predict changes in depressiveness during the pandemic: Extraverts showed an increase in depressiveness over time, particularly between pre-pandemic measurement and the first phase of the pandemic. Higher neuroticism appeared to have increased vulnerability as a rise in depressiveness were found among these adolescents throughout the entire course of the pandemic. In conclusion, the study discusses the significant impact of the pandemic on the well-being of adolescents and suggests that managing the pandemic during this specific developmental period is a challenge, even for those who are typically not considered at high risk.

TALK 2: Maternal Well-Being before and During the COVID-19 Pandemic: Did Mental Health Disparities Deepen Between Lone and Partnered Mothers in Germany?

Presenter: Claudia Recksiedler, German Youth Institute (DJI)

Co-authors: Christine Entleitner-Phleps, Alexandra Langmeyer, German Youth Institute (DJI)

The lives and daily routines of parents changed dramatically because of the COVID-19 pandemic, which affected their mental health. Particularly mothers reported increased psychological distress during the pandemic, which is likely related to the higher load of care responsibilities mothers shouldered to compensate for pandemic-related childcare and school closures (Li et al., 2021). Less is known about the pandemics' impact on lone mothers, who were already suffering from poorer mental health (Pollmann-Schult, 2018). Drawing on the life course perspective, which highlights the ripple effects of major historic events on individuals (Elder & Shanahan, 2006; Settersten et al., 2020), we aim to examine change in the maternal well-being during the pandemic. Because the life course perspective also focuses on the link between socially stratified exposures to stressors and their effects on individuals, we further aim to test whether change in well-being differed between lone and partnered mothers. To answer these aims, we capitalize on longitudinal data from the "Growing up in Germany" study collected both shortly before and during the pandemic in contrast to other surveys launched during the pandemic. Results from first-difference regression models revealed that lone parent status was not related to changes in subjective well-being or life satisfaction. However, higher levels of education were related to positive changes in subjective well-being and higher income was associated with positive changes in both outcomes. Models with interaction terms further showed that weaker social support and higher parenting stress before the pandemic, however, were related to positive changes in well-being and life satisfaction among lone mothers particularly. We interpret these surprising findings using approaches that argue some impactful events can serve as a leveller of the pre-existing social disparities of stratified life courses (Leopold et al., 2016), as well as "shift-and-persist" strategies employed by more vulnerable groups (Chen et al., 2012).

TALK 3: Determinants of Sleep Quality: Identifying Risk and Protective Factors that Predict Sleep Quality Over Time

Presenter: Katharina Loter, Tilburg University

Co-author: Claudia Recksiedler, German Youth Institute (DJI)

Ample studies demonstrated a strong link between the quality of night sleep and individuals' mental health (e.g., Baglioni et al., 2016; Carmela Alcántara et al., 2016; Freeman et al., 2020). Because the consequences of mental illness, such as suffering from depression, are more severe for older adults compared to younger age groups (e.g., with regard to an increased risk of death and disability; Rodda et al., 2011), our study aims to identify protective health behaviors that are associated with sleep quality over time. We drew data from SHARE, which samples individuals aged 50+ years across Europe (8 waves; 2004-2019). Our outcome was the average duration of night sleep and sleep problems at each wave. The main predictors were prospectively tracked health behaviors, such as physical activity, diet, weight loss or gain, and drug consumption (i.e., regular use of tobacco and/or alcohol). We also considered early-life and adulthood SES, as well as the occurrence of critical life events (i.e., becoming widowed between the waves of assessment), as potential risk factors for poorer sleep-in later life because previous research showed that lower SES and grief were associated with sleep problems (e.g., Arber et al., 2009; Lancel et al., 2020). Using hybrid models for panel data, preliminary analyses indicated that an improvement in health behaviors was associated with better sleep quality. However, experiencing widowhood and life course socio-economic disadvantage were strong predictors of poor sleep quality regardless of individuals' health behaviors. We interpret and discuss our findings through the lens of life course and stress-resiliency perspectives in the second half of life (Elder & Shanahan, 2006; Pearlin, 2010). Because SHARE is a cross-national panel study, we also examine and highlight country-specific differences in sleep quality and its determinants.

9C SYMPOSIUM

Disasters and Their Impact Across the Life Course: Insights from Natural Experiments, Big Data and Multiple Disaster Exposures

Chairs: Narayan Sastry, University of Michigan (Convenor: Ben Edwards, ANU)

Recent IPCC reports show that climate change has accelerated the frequency of natural disasters, yet little is known about the implications of these hazards across the life course. The papers in this symposium address key life course outcomes including physical and mental health, mobility and economic circumstances. Each paper has novel methodological features including the use of a natural experiment, big government data and multiple disaster exposures. The first paper by Cheng and colleagues reports on the long-term impacts of the Chinese famine in 1959-61 in childhood on non-communicable diseases over 50 years later using the China Health and Retirement Longitudinal Study. Sastry discusses the methodological benefits of linked US Census and disaster data to examine long-term studies of disaster impacts. He discusses the capacity of these data to create counterfactual comparison groups to the study of the long-term effects of Hurricane Katrina on the pre-hurricane population of New Orleans. Finally, Edwards and colleagues systematically examine the impact of multiple disasters (compound, recurrent, cascading and consecutive disasters) on risks of suicide and self-harm in Australia youth and examine risk and protective factors.

TALK 1: Exposure to the 1959-1961 Chinese Famine and Risk of Later-Life Non-Communicable Diseases: A Retrospective Cohort Study

Presenter: Mengling Cheng, University of Lausanne

Co-authors: Dario Spini, Nicolas Sommet, Daniela Jopp, University of Lausanne

Marko Kerac, London School of Hygiene and Tropical Medicine

Climate change and climate-related disasters pose major challenges for global health, particularly for low- and middle-income countries. It is estimated that by 2050 climate change could increase the risk of hunger/malnutrition by up to 20%, which is a risk factor for non-communicable diseases (NCDs) in later life. In this context, we used natural experiments of exposure to the 1959-1961 Chinese famine to investigate whether famine exposure is associated with later-life NCDs and if this association depends on: life stage at exposure, the domain of NCDs, and sex. We conducted a secondary data analysis of the China Health and Retirement Longitudinal Study (2011-2018, Nparticipants=11,106). We measured famine exposure using self-reported experience, life stages using age at exposure, and health using NCDs in six domains. We performed growth curve models. Our analyses revealed three findings. First, compared with unexposed participants, those exposed before age of 10 had a higher risk of later-life NCDs across all six domains, particularly if exposed in-utero and in the "first 1,000 days" of life. Second, the famine effects were most pronounced for cardiometabolic diseases, followed by urinary diseases, cancer, respiratory/digestive diseases, neural diseases, and arthritis. Third, the famine effects were similar for women and men. Our next steps would investigate the role of socioeconomic status (e.g., childhood family financial status, education, occupation, and income) in the association between famine exposure and later-life NCDs. Our findings highlight the need of actions to tackle the challenge of climate change and related disasters to improve global health.

TALK 2: New Data and Approaches to Studying Life Course Effects of Disasters

Presenter: Narayan Sastry, University of Michigan

Research on the life course consequences of being exposed to a natural or human-caused disaster is a topic of considerable interest but constrained opportunities. Existing studies of disaster effects on social, economic, health, and well-being outcomes tend to focus on the immediate aftermath. Many studies have, for example, examined the short-term displacement, mental health effects, and mortality consequences of hurricanes, floods, wildfires, and other similar events. There has relatively limited research to examine outcomes beyond the first year following a disaster. The leading reason for this research gap on the longterm effects of disasters is the lack of appropriate data. In the U.S., for instance, large national surveys that ask questions about a disaster stop doing so one year after the event. And few ongoing cohort or panel studies have a sufficient sample size to study natural disasters, which tend to be localized events. Although there are studies that track individuals following a disaster, these specialized studies tend to have small or select samples and are usually established after the disaster—and hence lack pre-disaster reports on circumstances and trajectories. In this presentation, we provide an overview of a new effort to study disasters in the U.S. using linked census and administrative data. Such linked data are now available to qualified researchers from the Census Bureau and other federal agencies through the Federal Statistical Research Data Centers and allow researchers to create unique life course and longitudinal data to study the long-term consequences of being exposed to a disaster. Further, the data support the creation of counterfactual comparison groups to help estimate causal effects of disaster exposure. We provide a detailed description of how these new data and this new approach are being used to study the long-term effects of Hurricane Katrina on the pre-hurricane population of New Orleans.

TALK 3: Multiple Natural Disasters, Suicide and Self-Harm of Youth and Family Functioning and Resources: Vulnerability and Resilience in an Australian National Birth Cohort Study

Presenter: Ben Edwards, Australian National University

Co-author: Paul Campbell, Matthew Taylor, Matthew Gray, Australian National University

Climate change has resulted in more people being exposed to natural disasters and being exposed more often. A recent National Academy of Sciences report suggested this increased prevalence and impact of natural disasters is the "new normal". Few studies have examined the relationship between exposure to natural hazards and suicide and self-harm in youth. We extend prior research by investigating the association between multiple disasters and the risks of self-harm and suicide longitudinally in a nationally representative longitudinal cohort of Australian adolescents 14-15 years to 18-19 years of age. We also test whether

the following are risk and protective factors: household income, financial hardships, poverty, joblessness, parenting, parent relationship quality, relationship separation, social support, neighborhood collective efficacy and stressful live events.

Youth exposure to natural disasters was identified through parental self-reports, and separately through linked geospatial data for the local area. Different types of multiple disaster exposure (compound disasters, recurrent disasters, cascading disasters and consecutive disasters) were investigated. Using 8,725 person-waves of data from 2,903 adolescents, findings from random effect models suggest that parental reports of fire or floods increase the risk of self-harm ideation, self-harm, suicidal ideation and suicide attempts. Compound disasters of fire/flood and drought were also associated with increased risk of suicidal thoughts. Cascading disasters of drought followed by fire/flood increased the risks of self-harm. Finally, we report on the extent that risk and protective factors explain variation in the impacts of disaster exposures.

9D

INDIVIDUAL PAPERS (MENTAL HEALTH 4)

TALK 1: Intergenerational Transmission of Health in the UK

Presenter: Nancy Daza-Báez, London School of Economics

Co-authors: Emla Fitzsimons, George B. Ploubidis, University College London

This paper examines the intergenerational transmission of health in the UK, using data from the 1970 British Cohort Study (BCS70). The study focuses mainly on the transmission of comorbidity of physical and mental health issues from mothers to their offspring. We find that having a mother with poor mental health or comorbidity of physical and mental health issues during the offspring's early childhood or adolescence significantly increases the chance of their offspring having mental health problems in early adulthood and comorbidity of physical and mental health problems in early and mid-adulthood. Specifically, daughters tend to develop mental health problems in early adulthood that turn into comorbidity of physical and mental health problems in midadulthood. In contrast, sons who had mothers with poor mental health during early childhood are more likely to report mental health problems in midadulthood and comorbidity of physical and mental health problems in early and midadulthood. However, for sons whose mothers had mental health problems or comorbidity of physical and mental health during their adolescence, comorbidity of physical and mental health problems was observed during early and midadulthood. These findings suggest that the timing and type of maternal health problems influence the transmission of health from mother to offspring.

TALK 2: Association of Childhood Weight Trajectory and Depressive Symptoms at 17 Years: Exploring the Mediating Role of Body Image in the UK Millennium Cohort Study

Presenter: Madelaine Davies Kellock, University College London

Co-authors: Yvonne Kelly, Anne McMunn, Francesca Solmi, University College London

Both childhood obesity and mental ill-health have been increasing over the past few decades. Genetic studies point toward a causal link between BMI and depressive symptoms. Some evidence suggests that body satisfaction mediates this association, but this is largely based on low quality methodology. We used counterfactual mediation analysis to explore the extent to which body satisfaction mediates the association between childhood BMI trajectory and adolescent depressive symptoms. Using Millennium Cohort Study data on UK adolescents, we modelled childhood BMI trajectories using latent class growth analysis. Our outcome was depressive symptoms at age 17. Body satisfaction, the proposed mediator, was measured at age 14. We used regression analysis and then counterfactual mediation analysis to estimate total, direct and indirect effects of BMI trajectory on depressive symptoms. We calculated the proportion of the total effect that is mediated via body satisfaction. In our sample (N=13,025), we found that adolescents with moderate and high BMI trajectories had lower body satisfaction and higher depressive symptoms than those with low BMIs. Higher body satisfaction was associated with lower depressive symptoms. Preliminary results from mediation analysis suggested evidence of a total effect of BMI trajectory on depressive symptoms. Compared to those with low BMI trajectories, adolescents with moderate trajectories had 0.29 higher (95% CI 0.10, 0.49) and those with high trajectories had 0.60 higher (95% CI 0.21, 0.99) mean depressive symptom scores. There was weak evidence for a direct effect in the high BMI group and strong evidence for an indirect effect. Approximately 40% of the association between BMI and depressive symptoms was mediated via body satisfaction. These results may reflect the contribution of societal weight stigma to rising levels of depressive symptoms in young people and provide support for interventions that target body image concerns.

TALK 3: Parental Death and Initiation of Antidepressant Treatment in Surviving Children and Youth: A National Register-Based Matched Cohort Study

Presenter: Can Liu, Stockholm University

Co-authors: Alessandra Grotta, Ayako Hiyoshi, Lisa Berg, Pekka Martikainen, Mikael Rostila, Stockholm University;

Elizabeth Wall-Wieler, University of Manitoba; Ichiro Kawachi Harvard School of Public Health

Background Population-based longitudinal studies on bereaved children and youth's mental health care use are scarce and few have assessed the role of surviving parents' mental health status. Methods Using register data of individuals born in Sweden in 1992-1999, we performed a matched cohort study (n=117 518) on the association between parental death and subsequent initiation of antidepressant treatment among individuals bereaved at ages 7-24 years. We used flexible parametric survival models to estimate the hazard ratios (HRs) over time after bereavement, adjusting for individual and parental factors. We further examined if the association varied by age at loss, sex, parental sociodemographic factors, cause of death, and the surviving parents' psychiatric care. Findings The bereaved were more likely to initiate antidepressants treatment than the nonbereaved matched individuals during follow-up (15.4% vs. 10.8%, p<0.0001). The HRs peaked in the first year after bereavement and remained higher than the nonbereaved individuals until the end of the follow-up. The average HR over the 12 years of follow-up was 1·48 (95% confidence interval [1·39-1·58]) for father's death and 1·33 [1·22-1·46] for mother's death. The HRs were

particularly high when the surviving parents received psychiatric care before bereavement (2.11 [1.89-2.56] for father's death; 2.14 [1.79-2.56] for mother's death) or treated for anxiety or depression after bereavement (1.80 [1.67-1.94]; 1.82 [1.59-2.07]). Interpretation The risk of initiating antidepressant treatment was the highest in the first year after parental death and remained elevated over the next decade. The risk was particularly high among individuals with surviving parents affected by psychiatric morbidity.

9E INDIVIDUAL PAPERS (BIRTH AND REPRODUCTION)

TALK 1: COVID-19 and Women's Fertility Intentions in South Korea: A Longitudinal Qualitative Study

Presenter: Christie Sennott, Purdue University Co-author: Youngeun Nam, Purdue University

The COVID-19 pandemic has altered fertility and family dynamics around the world. Shifting work and family conditions, alongside the uncertainty and health risks associated with COVID-19, are likely to have influenced fertility intentions. This study provides the first longitudinal qualitative study of Korean women's fertility intentions during the COVID-19 pandemic. Interviews were conducted with 37 mothers in South Korea before (2019) and during (2020 and 2021) the pandemic (N=102), enabling a natural experiment of the influence of COVID-19 on women's fertility intentions Our findings show that women were more likely to report positive changes in intentions for another child vs. negative changes in intentions. Participants with access to workfamily resources during COVID, such as increased help with childcare and family supportive workplaces, were more likely to report positive changes in intentions, whereas women without these resources and those concerned with the health risks of COVID-19 reported negative changes. Our findings suggest childcare resources and supportive workplaces may help to sustain and even increase women's fertility intentions during times of societal disruption.

TALK 2: Career or Children First? Investigating the Interplay Between Women's Careers and Child Development

Presenter: Susanne Schmid, University of Oldenburg

Co-authors: Mathias Huebener, Malin Mahlbacher, Federal Institute for Population Research (BiB); Carl von Ossietzky, Gundula Zoch, University of Oldenburg

The positive role of maternal age for augmented child ability is well-documented, however, evidence on the complex interplay with maternal employment remains incomplete. We investigate how the timing of birth in women's career affects children's cognitive and non-cognitive development. We pay particular attention to workplace and employment conditions and how they contribute to the timing of birth and the return to the labour market. To determine underlying channels of the effects of maternal age in the labour market context on children, we consider mothers' career development before the birth of the first child. Drawing on earlier insights from research on family formation, child development and theory of human capital as well as life course theory, we argue that, on the one hand, less favourable working conditions, such as high levels of uncertainty or temporary contracts, are likely to delay births. On the other hand, workplace conditions may support family formation, e.g., by providing family-friendly policies that facilitate the reconciliation of work and family life after birth. Our analyses are based on the German NEPS Starting Cohort 1 linked to administrative employment biographies of mothers (NEPS-SC1-ADIAB; 2012-2020; N≈900). Preliminary results from OLS regression show significant associations between maternal age at birth, work experience and children's math and vocabulary competences. Examining the interrelationships in greater detail is of high policy relevance given the continuing increase in maternal age at first birth and widespread maternal employment after childbirth.

TALK 3: Family Size Intentions and Achieved Fertility

Presenter: Zsolt Spéder, Hungarian Demographic Research Institute

Our aim is to examine how family size intentions at the beginning of the life course are being realised. The database of the Hungarian Generations and Gender Survey, covering a period of one and a half decades, and including five data collection waves, allows a prospective analysis. It is possible to track whether family size intentions 'measured' in 2001, during the first wave of data collection, are maintained or change from interview to interview, and finally, after 15 years, whether the intentions are realized. The data also allow us to examine what objective and subjective factors, life course events support family size intentions to be realised, and what factors lead to lower or higher than planned numbers of children. Our sample consists of women and men aged 18-34 in 2001, i.e., born between 1967 and 1983. Realization of intentions are examined at both individual and cohort levels. At the cohort level, intentions and their achievement are very close, yet the 'almost' completed fertility is below the intended one. At the individual level, on the other hand, we observe a large number of "mismatches". Overall, the "almost" completed fertility at the cohort level, is the result of large individual "underachievement" or "overachievements". Our preliminary results of high rates of "mismatches" are consistent with the results of the US studies but differ in that Hungary has a higher rate of under-fulfilment. Multivariate analyses reveals that the instability of the couple relationship is the main determinant of underachievement. Attitudes also matter: the non-religious and the ideal age for having children is late life underachieve too. The effect of educational attainment is unstable; in our final model, those with tertiary education are less likely to be underachievers. Additional time-varying factors (e.g., income status, couple' work-sharing profile) are foreseen to be included.

TALK 4: How Does the Region of Origin Matter? The Transition into Motherhood Among First-Generation Immigrants in Germany

Presenter: Leonie Diffené, University of Cologne

Co-author: Roberta Rutigliano, OPIK - University of the Basque Country UPV/EHU

Previous research has examined when and why immigrant women living in Germany become mothers, provided they come from former guest worker countries. Since migration from other countries and regions of origin has increased since the 1990s, less is known about the fertility behavior of more recent immigrant groups in Germany. This study focuses on the transition to motherhood among first-generation immigrant women from three different regions of origin who were childless before migrating to Germany in 1990 or later. The objective is to explain why immigrants from Central and Eastern European (CEE) or non-European countries might be more likely to have a first birth than Western European immigrants. Using longitudinal data from the German Socio-Economic Panel, I first employ discrete-time event-history models to estimate the effects of the region of origin on the predicted probability of having a first birth. Second, I use the Karlson/Holm/Breen method to test whether sociodemographic characteristics and the age at migration mediate the region of origin effects. Results suggest that, on average, CEE and non-European immigrants have higher first-birth risks partly because they are less educated and younger at the time of migration compared with Western European immigrants. It can be concluded that immigrants' transition to motherhood is related to their socialization context and selection into sociodemographic characteristics. The present findings contribute to life course research on migration and fertility by highlighting the relevance of the region of origin in immigrants' transition to motherhood.

9F INDIVIDUAL PAPERS (EMPLOYMENT AND RETIREMENT)

TALK 1: The Potential to Prevent Disability Retirement Due to Common Non-Communicable Diseases

Presenter: Elli Hartikainen, Finnish Institution of Occupational Health

Co-authors: Laura Salonen, Taina Leinonen, Svetlana Solovieva, Finnish Institute of Occupational Health

Population aging confronts most of the developed countries with a rapid decline in the proportion of people participating in the labour force. Disability retirement is the major reason for losing working years over the working life course, yet occupational variation is considerable. However, the knowledge on occupational inequalities is limited. We evaluated the potential of occupational exposures - e.g., physically heavy work and low job control - to prevent disability retirement due to musculoskeletal, cardiovascular and neurological diseases, mental disorders and cancers. We followed Finnish employees aged 30-60 years (n = 1 146 744) from January 2005 to June 2016 for disability retirement. We used age-adjusted competing risk regression models to examine the association of occupation and job exposures with disability retirement. We calculated population attributable fractions and examined the impact of exposures on the occupation-specific excess risk of disability retirement in order to evaluate the potential to prevent disability retirement. In addition to main diagnostic groups, we examined two specific musculoskeletal diseases: sciatica and non-specific low back pain (nLBP). Occupational exposures were assessed using job exposure matrices. Across major disease groups, physically heavy work and low job control were most strongly associated with disability retirement due to musculoskeletal disease, especially among men. Within musculoskeletal diseases, both exposures were more strongly associated with disability retirement due to nLBP than sciatica. As compared to science professionals, both men and women working in manual occupations had an elevated risk of disability retirement due to nLBP and sciatica, which was largely explained by occupational exposures. Our results suggest that reduction of unfavorable occupational exposures has potential to prevent disability retirement due to common noncommunicable disease, especially among men with LBP and among those working in manual occupations. Overall, a more focused prevention strategy has a higher potential to prevent disability retirement than a non-specific strategy.

TALK 2: How Do Senior Couples Divide Housework and Care work? A Cross-National Comparison

Presenter: Magdalena Gerum, SHARE BERLIN Institute GmbH

Co-authors: Afife Yasemin Yilmaz, Maria Magdalena Quezada Villanueva, Alexander Schumacher, SHARE BERLIN Institute GmbH The gender-specific division of housework and caregiving is an enduring and important aspect of gender inequality. Previous research shows that among middle-aged couples, women are still contributing a larger share of this unpaid work. At the same time, we know little about how unpaid work is distributed among seniors. Therefore, studies from a life course perspective are needed to understand how couples evolve and adapt in this division of unpaid labor, for example after entering retirement, or as family members age and caregiving demands diversify. Using harmonized time expenditure data from Wave 8 of the crossnational Survey of Health, Aging, and Retirement in Europe (SHARE), we will shed light on how and under which circumstances gender roles persist or adapt through different life stages as couples move from employment and caring for their own children, to retirement and newly emerging caregiving needs of aging parents or partners. Our sample consists of cohabiting heterosexual couples aged 50+ in 18 European countries plus Israel (n=7,932). Descriptive findings estimating the relative time men and women spent on housework and care work show significant differences between couples' relative time spent at the country level. For more in-depth analyses, we consider factors influencing the unequal distribution of unpaid work between couples, focusing on micro- and macro-level variables, using a fractional regression model. Preliminary results show that age and physical limitations influence time spent on unpaid work and that the country in which the couple lives is also significant. Furthermore, life events such as education and employment history affect the division of labor. Additionally, SHARE's cross-national dimension offers first steps for an exploration of how caregiving and housework roles differ across different policy regimes, by looking at how differences in regime types correspond to more or less gender-egalitarian family structures.

TALK 3: Moving On: The Retirement Pathways of Ontario High School Graduates from the Class of '73

Presenter: Karen Robson, McMaster University

Co-author: Paul Anisef, York University

This paper presents findings on the retirement experiences of an Ontario cohort of late baby boomers who were part of the high school graduating "Class of '73". The findings are based on the seventh phase of a 46- year longitudinal research study with study participants now either in the early stages or on the cusp of retirement. The project began as a short-term study of high school students and their attitudes and behaviours with respect to educational plans to provide projection data for post-secondary enrolments to the Ontario Ministry of Colleges and Universities (MCU). With the assistance of the Survey Research Centre at York University, a sample survey of Ontario grade 12 students was carried out in the spring of 1973 (N=2556). Over the next four decades, a total of six follow- ups were conducted with the same cohort. These follow-ups were conducted in the fall of 1973 (Phase II, N=2156), fall of 1974 (Phase III, N=2163), fall of 1979 (Phase IV, N=1522), summer of 1988 (Phase V, N=1129), winter of 1994 (Phase VI, N=788)), and fall of 2019 (Phase VII, N=280), effectively converting the project into a longitudinal study of education, work, and life pathways for a generation that has seen unprecedented change in Canada's economy and society. In this paper we examine how the Class of '73 conceptualize, plan for, and experience retirement, and assess the influence of demographic factors on the different pathways taken by study participants. A literature review identifies the changing face of retirement trends in Canada and reveals that, while earlier generations emphasized the traditional dichotomy of work to retirement, baby boomers appear to place a higher value on work-life balance in retirement. Our analysis of survey data and indepth interviews reveal that Class of '73 experiences seem consistent with the previous limited research on retirees in Canada. They align with the multiple ways that retirement has been defined in legal and social spheres. Some participants were fully retired, some partially retired, some retired from one job to move on to another. Only 44 percent of those not yet retired planned to completely retire in the future, demonstrating the assorted forms of retirement, including part-time work, that have emerged since the end of mandatory retirement.

TALK 4: Does Type, Timing and Duration of Lifecourse Unemployment Differentially Predict Dementia Risk? A Novel Application of Sequence Analysis

Presenter: Lucia Pacca, University of California San Francisco (UCSF)

Co-author: Haobing Qian, Willa D. Brenowitz, Anusha M. Vable, University of California San Francisco (UCSF); Amal Harrati, Maria Glymour, Mathematica

Unemployment may influence Alzheimer's Disease and related disorders (ADRD), the 6th leading cause of death in the United States, but prior research is sparse. This study identifies employment trajectories using sequence analysis, and evaluates whether the type, timing, and duration of work gaps are associated with ADRD risk. Data came from the U.S. Health Retirement Study (N= 5,914). Information was recorded on life course participant employment (full time or part time), reasons for work gaps (unemployment, schooling, caregiving or disability), or unreported. We created employment trajectory clusters from age 18 to 65 using sequence analysis and cluster analysis. ADRD outcomes were dementia probability score and memory score from age 70 onwards. We used generalized estimating equations to estimate the association between employment trajectories and ADRD adjusting for age, gender, birthplace, and childhood socioeconomic status. We identified 17 employment trajectories, including one disability trajectory, and six family caregiving trajectories. Compared to uninterrupted work, the disability trajectory was associated with worse memory scores (b=-0.08, CI: -0.13, -0.05) and higher dementia probability (b=0.02, CI=0.01, 0.04). Among those who cared for family members, results varied: those who did not report any work before and after a family gap had worse memory score (b=-0.09, CI: -0.14, -0.05) and higher dementia probability (b=-0.09, 95% CI: 0.01, 0.04), while those who had a family gap between jobs had similar memory scores and dementia probability. Those with long periods of unreported employment status had worse memory scores (b=0.09, 95% CI: -0.13, -0.05) and higher dementia probability (b=0.03, 95% CI: 0.01, 0.04). Results suggest the type and timing of work gaps are differentially associated with ADRD risk. Work gaps due to disability or unreported employment status predicted higher ADRD risk, while work gaps due to caregiving varied by work status such that any work predicted lower ADRD risk.

10A SYMPOSIUM

How Did We Get Here? Examining the Influence of Life-Course Histories in Two British Birth Cohorts on Mid-Life Health and Economic Outcomes Amid COVID-19 and Changes to Public Policy

Convenor: Vanessa Moulton, University College London

The context of lived experiences is important in understanding differences in life outcomes. The 1958 National Child Development Study (NCDS) and the 1970 British Cohort Study (BCS70) are two nationally representative cohorts, with rich prospective economic, health and social data from birth through adulthood to later mid-life. The cohort members are now in their 50's and 60's, during their midlife the pandemic, and changes in life-expectancy and an ageing population have resulted in fundamental changes, including new legislation, which may have influenced their financial circumstances, economic status and transitions from employment to economic inactivity, as well as their physical and mental health. This symposium showcases papers investigating the association between life-course mental health histories in both cohorts and financial circumstances during the pandemic; early and mid-life factors influencing economic stability and change over time in men and women nearing the Statutory Pension Age from age 55 to 62 and age 62 to 63, and the impact of lifetime poverty dynamics on multimorbidity in midlife.

TALK 1: Adult Life-Course Trajectories of Psychological Distress and Economic Outcomes in Midlife During the COVID-19 Pandemic: Evidence from the 1958 and 1970 British Birth Cohorts

Presenter: Vanessa Moulton, University College London

Co-authors: Alice Sullivan, Alissa Goodman, Samantha Parsons, George B. Ploubidis, University College London

Financial adversity in times of economic recession have been shown to have an unequal effect on individuals with prior mental health problems. This study investigated the relationship between mental health groupings across the adult life-course and change in financial situation and employment status during the COVID-19 pandemic, as well as the use of financial measures to mitigate the economic shock. Using two nationally representative British birth cohorts, the NCDS (1958) n = 17,415 and 1970 BCS n = 17,198, we identified 5 different life-course trajectories of psychological distress from adolescence to midlife which were similar but not identical across the two cohorts. We explored their relation to changes in financial and employment circumstances during the pandemic, and in addition, we investigated whether different mental health trajectories were supported by government and used other methods to mitigate their financial situation. We found that the financial circumstances of prepandemic trajectories of psychological distress with differential onset, severity, and chronicity across the life-course were exacerbated by the COVID-19 economic shock. Compared to pre-pandemic trajectory groupings with no, minor, or psychological distress symptoms in early adulthood, the 'stable-high' (persistent severe symptoms), 'midlife-onset' (symptoms developing in midlife), and 'adult-onset' trajectory groups were more likely to seek support from the UK governments economic response package. However, trajectories with pre-pandemic psychological distress were also at greater risk of reducing consumption, dissaving, relying on increased financial help from family and friends, and also taking payment holidays and borrowing. This work highlights different trajectories of pre-pandemic psychological distress, compared to groups with no symptoms were more vulnerable to pandemic-related economic shock. By adopting unsustainable mitigating measures (borrowing and payment holidays) to support their financial circumstances during COVID-19, these mental health trajectories are at even more risk of lasting adverse impacts and future economic difficulties.

TALK 2: Life Course Antecedents of Change and Stability in Economic Activity from Age 55 to 63 in the 1958 British Birth Cohort

Presenter: Vanessa Moulton, University College London

Co-authors: Matt Brown, Alissa Goodman, George B. Ploubidis, University College London

In the UK, despite increases in the Statutory Pension Age (SPA) a large proportion of 55-65 year-olds have left the labour market recently. Extensive legislation has changed the landscape for retirement and pension provision, including equalising and increasing the SPA for men and women, changing the funding structure of the state pension, as well as changes to private pension provision. We used data from the 1958 British birth cohort (n = 17,000) who in 2024 will reach SPA (age 66). We examined economic stability and change over time in men and women from age 55 to 62 and age 62 to 63, to investigate the influence of early and in mid-life factors on changes in economic activity by age 62/63. At age 55 (2013) 86.4% of men and 74.5% of women were economically active, by age 62 (2020) 60.3% of men and 44.4% of women were still active, while 25.0% of men and 28.1% of women were now inactive (most retired). From age 62 to 63 (2021) a further 7.7% of men and 6.2% of women became economically inactive, again mainly retiring. From 55 to 62, for men becoming economically inactive was related to having an employer's pension, home ownership, long-term illness, and having less than two children in the household. For women higher household income, home ownership and not having children in the household was important. From age 62 to 63, having an employer's pension and a retired partner increased likelihood of economic inactivity, while long-term illness for men and having a sick or disabled partner for women were also important. This study shows that both socioeconomic and health inequalities over the life course were important drivers of becoming economically inactive in the youngest old in Britain.

TALK 3: Life Course Poverty Dynamics and Multimorbidity in Midlife: Evidence from the 1970 British Birth Cohort

Presenter: George B. Ploubidis, University College London

Co-authors: Vanessa Moulton, Bozena Wielgoszewska, Alissa Goodman, University College London

Around one in five of the UK population were in poverty in 2020/21 with those in the most vulnerable and precarious circumstances, likely most exposed to the current cost-of-living crisis. Poverty can impact on the health of people at all stages of life, with children growing up in poverty being at higher risk of developing chronic health conditions, and these conditions may persist into adulthood, potentially contributing to a higher risk of multimorbidity. Despite the large literature on the impact of poverty on health, less is known on how poverty dynamics (permanent poverty, moving in and out of poverty) over the life course are related with multimorbidity in midlife. We use data from a nationally representative British birth cohort, the 1970 BCS n = 17,198, on which recent work has shown the prevalence of multimorbidity in midlife to be 33%. We operationalise poverty dynamics using a triangulation approach that allows us to capture the full variation in the experience of poverty from adolescence to midlife. First, we use longitudinal finite mixture models to identify a longitudinal typology of population relevant poverty trajectories to summarise the experience of poverty. Second, we use G-computation methods to test the causal effect of specific policy relevant poverty patterns (permanent poverty, experience of poverty in specific life stages) with multimorbidity in midlife, while accounting for time varying confounding. Third, we use multilevel growth curve modelling, a population average approach to capture average change over time in poverty. Our study offers a holistic view on the impact of poverty dynamics on multimorbidity in midlife and has implications for the impact of the current cost of living crisis in the UK on health and life expectancy.

10B SYMPOSIUM

Untangling Heterogeneity in Ageing by Examining the Impact, Interaction and Variation of Physical Health Loss

Convenor: Bram Vanhoutte, Free University of Brussells

This symposium brings together three longitudinal studies that want to address the understudied heterogeneity in ageing trajectories by focusing on different sources of variation. The first study proposes to focus on the impact a key event of ageing such as health loss has on wellbeing to better understand interpersonal variation in wellbeing trajectories, to better understand resilience in ageing in Europe. The second study interrogates the relation between physical and psychological aspects of ageing by examining how the gap between subjective and chronological age evolves over age, and how it is influenced by limitations in functional health in England. The last study addresses the under researched issue of ethnic variation in ageing trajectories by examining to what extent differences in the level and development of frailty over age differ between ethnic groups in the UK.

TALK 1: Resilience in Ageing: The Impact of Health Loss on Wellbeing

Presenter: Thibault Kohler, Free University of Brussells Co-author: Bram Vanhoutte Free University of Brussells

Health loss one is of the main ways in which social inequalities are transformed into unequal ageing pathways. But to what extent do inequalities in the impact of health loss give rise to resilience in later life?

This study wants to focus more on inter-individual differences in responses to health shock, to better understand the large heterogeneity in aging, by examining the impact of onset of functional health problems on wellbeing, rather than its evolution over chronological time (measured by age or wave). The aim of this study is to investigate what determines level and change over time in wellbeing after the onset of functional health problems, and whether these determinants differ between affective, cognitive, and eudemonic measures of wellbeing.

We use data from waves 4 to 8 of the Survey of Health, Ageing and Retirement in Europe (SHARE), a panel study of people aged 50 or over. Functional health loss is defined as the transition from having no limitations to at least one limitation in (instrumental) activities of daily living ((I)ADL). The data are centred around the transition, so that the metric of time is years before / after the onset of physical limitation. This data restructuration allows us to construct more than 9000 trajectories of well-being from 17 European countries. Using spline multilevel models for change, we have insight into determinants of both the level and evolution over time of wellbeing after onset of health shock for three different measures of wellbeing (using CES-D, life satisfaction and CASP).

TALK 2: The Impact of Health Loss on the Gap Between Chronological and Subjective Age from a Life Course Perspective

Presenter: Bram Vanhoutte, Free University of Brussells

Co-author: El-Mouksitou Akinocho, Free University of Brussells

Chronological age, or the number of years elapsed since birth, is one of the key structural determinants to one's identity, perhaps only second to gender. Subjective and chronological age rarely converge, and most people do not feel their age. While it is clear there is a strong impact of diminished functional health on subjective age, there are few longitudinal studies that examine this relation. The aim of this study is to investigate, to what extent the gap between chronological and subjective age changes over time, considering changes in both chronological age, functional health, and their interplay.

This study analyses data from four waves of the English Longitudinal Study on Aging (ELSA). Using a random intercept mixed model, we examine the trajectories of the difference between chronological age and the subjective age of 12,000 respondents and investigate how the onset of functional health problems influences this gap.

Participants felt on average 10 years younger than their actual age, and the subjective age gap widens with increasing age until about 70 years of age. While having one health limitation increases one's subjective age at age 50 with 3 years (and having multiple limitations with 5 years), the influence of health diminishes over age. At advanced ages high discrepancies between chronological and subjective age are common both in respondents with and without functional health limitations.

TALK 3: Mapping and Understanding Ethnic Variation in Level and Development of Frailty Over Age

Presenter: Alex Labeit, University College London

Co-authors: Jay Banerjee, Christopher Williams, University of Leicester; Sharma Surinder, Hanne Laceulle, Susan Pickard, University of Liverpool; Simon Conroy, University College London; Bram Vanhoutte, Free University of Brussells

Care and management of frailty in older people becomes increasingly important. However, ethnic variation in both level and development over age of frailty are poorly understood. This study wants to address this research gap.

The aim is in a first step to construct a longitudinal Frailty Index to study the change in frailty over time in the general population from 50 years onwards. In a second step, we want to map out frailty trajectories by ethnic group (Indian, Pakistani, Bangladeshi, Caribbean, African and White British ethnic background), to study the differences in starting points and the intensity of development of frailty over age. In a third step we examine the validity of explanations for these differences.

We make use of Understanding Society, a large panel study of 40,000 households and focus on the 11,500 participants from diverse ethnic minorities (Bangladeshi, Indian, Pakistani, Black Caribbean and African), as well as a White British baseline group. A frailty index to track changes in subjective, physical, functional, cognitive health and chronic conditions is constructed based on Rockwood's Framework. Changes over time are analysed in a multilevel growth modelling framework.

10C SYMPOSIUM

Strength in Difference: Major Cohorts Across the Australasian Region

Chair: Meredith O'Connor, Murdoch Children's Research Institute (Convenor: Ben Edwards, ANU)

The Australasian region has a long history of longitudinal cohort studies and is home to a range of internationally relevant cohorts. These cohorts have many areas of alignment, reflecting collaborative relationships and knowledge sharing across studies. They also differ in many aspects, such as their target populations, methodological innovations (e.g., linkage to administrative data, embedded trials), and instrumentation (e.g., survey data, biomarkers, imaging). This symposium will showcase major Australasian cohorts, with a focus on areas of complementarity and the research opportunities that this generates. Presentations will include profiling of Growing up in Australia The Longitudinal Study of Australian Children, a leading Australian cohort established in 2004; New Zealand's largest contemporary longitudinal study of child development Growing up in New Zealand; the ORIGINS prospective longitudinal intervention birth cohort of 10,000 families in Western Australia; Generation Victoria (GenV) which is aiming to establish a whole-of-state birth cohort; and the hub of over twenty core longitudinal cohorts collaborating through the Melbourne Children's LifeCourse Initiative.

TALK 1: Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC)

Presenter: Lisa Mundy, Australian Institute of Family Studies

Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC) is a landmark study following the development of 10,000 young people and their families from across Australia. This is a 20-year multidisciplinary study designed to examine a broad range of research questions across areas such as parenting, childcare, education, health and physical development, and social and emotional functioning. The study takes a developmental pathways approach, emphasising trajectories of development across the lifespan. This approach allows factors that result in positive or poor outcomes to be identified, as well as a focus on key transition points such as the transition into primary school, the transition to secondary school and the transitions from school. The study began in 2004 with a representative sample of children (who are now adolescents and young adults) from urban and rural areas of all states and territories in Australia. Two cohorts were recruited; the first cohort of 5000 children was aged 0-1 years (B cohort) and the second cohort of 5000 children were 4-5 years (K cohort) at baseline. To date, nine waves of data have been collected with wave 10 due to enter the field in late 2023 when participants are (B cohort 19-20 years; K cohort 23-24 years). The study is conducted in partnership between the Department of Social Services and the Australian Institute of Family Studies. Fieldwork is conducted by Roy Morgan and advice provided by a scientific advisory group. The study informs social policy and is used to identify opportunities for early intervention and prevention strategies. This presentation will provide an overview of LSAC, as well as demonstrating the impact and opportunities of this dataset.

TALK 2: Growing Up in New Zealand: The Longitudinal Study of New Zealand Children and Their Families

Presenter: Susan Morton, University of Technology Sydney

Growing Up in New Zealand is New Zealand's largest contemporary longitudinal study of child development. The Growing Up in New Zealand cohort of 6853 children was recruited via their parents during the mother's pregnancy in 2009 and 2010 and the diversity of the children in the cohort has been shown to be representative of the current ethnic and socioeconomic diversity of births and parents having children in Aotearoa, New Zealand at that time. During pregnancy 1 in 4 of the children were expected by their parents to identify as Māori, 1 in 5 as Pacific and 1 in 6 as Asian, with more than half expected to identify with multiple ethnicities across their life course. At eight years of age the children assessed their own ethnic identity for the first time. The study has been explicitly designed to reflect the voices and perspectives of young people growing up in the context of their families/whānau in 21st century New Zealand. Longitudinal information has been collected to shape a deeper and more context relevant understanding of how parental, family and whānau, home, community and societal influences collectively influence the wellbeing and development of contemporary New Zealand children in the context of their diverse families from pregnancy and across the life course. Where feasible information collected from the cohort is explicitly designed to match the way routine administrative information is collected about wellbeing and family environments in surveys administered by Statistics NZ, MoH and MSD. The information from the first decade of the longitudinal study has recently been utilised by policy makers to help better understand why we see differential wellbeing outcomes for children growing up in diverse families with diverse identities, cultures and backgrounds from their first thousand days of life and throughout their childhood years.

TALK 3: The ORIGINS Project

Presenter: Jacqueline Davis, Telethon Kids Institute

Co-authors: Desiree Silva, Susan Prescott, Telethon Kids Institute

The ORIGINS Project is a 10-year collaborative initiative to establish a prospective longitudinal intervention birth cohort of 10,000 families in Western Australia. Comprehensive data and biological samples are collected from participant families at multiple timepoints from pregnancy until the child turns five. ORIGINS aims to improve the health of the next generation through improved pathways to optimise the early environment. Participant information is collected at two levels: 'active' participants take part in regular child health and development assessments, collect samples and answer online questionnaires at multiple timepoints throughout their five-year commitment, while benefitting by receiving real-time feedback and referral for early intervention when required. The 'non-active' cohort consent for their routinely collected hospital and health record data to be shared with ORIGINS researchers. Uniquely, ORIGINS participant families can enrol in multiple independent research studies, both interventional and observational, maximising on, and further contributing to the research platform. As at February 2023, ORIGINS has consented 8,482 participant families, including 7,174 birthing women, 7,385 babies and 2,298 non-birthing partners, equalling a total of 16,857 individual participants. Now in its sixth year, the ORIGINS research platform has generated millions of longitudinal data points and over 300,000 biological samples that are available for multiple research studies. Over 40

independent studies are nested within ORIGINS investigating outcomes such as allergies, neurodevelopmental, physical health, lifestyle and environmental impacts, breastfeeding and nutrition. This presentation will showcase the impact of ORIGINS on the local community as well as the richness of the data and biological collections that will have wide-reaching implications. The ORIGINS Project: https://originsproject.telethonkids.org.au/.

TALK 4: Generation Victoria (GenV)

Presenter: Elizabeth Hughes, Murdoch Children's Research Institute

Co-authors: William Siero, Alisha Gulenc, Suzanne Long, Susan Clifford, Tony Frugier, Naomi Schwarz, Simon Hall,

Natasha Zaritski, Sharon Goldfeld, Richard Saffery, Melissa Wake, Murdoch Children's Research Institute

Generation Victoria (GenV) is creating large, parallel whole-of-state birth and parent cohorts to support discovery and interventional research. It is open to all families residing in Victoria with a baby born over a two-year period (~150,000 births) beginning October 2021. GenV combines existing biosamples and data (geospatial, clinical, administrative) with GenV-collected biosamples, surveys and phenotypic data. Groundwork since 2017 includes installation of a fully-automated -80°C biostore, stateof-the-art IT platforms, ethics and governance approvals, agreements with birthing hospitals and pathology services, a 'GenV and Me' app for remote data collection, and capability to integrate collaborative studies. Rollout began late 2020, ultimately scaling to >130 GenV recruiters and 58 hospitals, with phone and online self-guided options for parents missed during the birth admission. As of March 2023, the GenV cohorts comprised 33,000 families (85,000 parent and child participants) with 90% consenting to biosamples (1st, 2nd, 3rd trimester blood; newborn blood spot, saliva, breastmilk, infant stool). Reflecting GenV's Inclusion principle, materials are at accessible literacy levels in multiple languages, and our sample closely resembles Victoria's annual birth census on regional domicile, primary language at home not English, and First Nations identity. Collaborators have leveraged major academic and government grants for child or adult integrated studies spanning novel screens for congenital infections and syndromes, vaccine safety in pregnancy, new registries (hip dysplasia, developmental regression, hearing loss) and a genomic diversity library of non-Europeans. Planning is commencing for GenV's Intervention Hub and major face-to-face school entry wave. This presentation will showcase GenV's unique design as both cohort and platform and its opportunities for transformational research.

TALK 5: The Melbourne Children's LifeCourse Initiative

Presenter: Meredith O'Connor, Murdoch Children's Research Institute

Co-authors: Margarita Moreno-Betancur, David Burgner, Craig Olsson, University of Melbourne

The Melbourne Children's LifeCourse Initiative leverages the value of existing cohorts to improve child and adolescent health. The initiative includes 38 studies hosted by or in collaboration with the Murdoch Children's Research Institute, with 23 core longitudinal cohorts including LSAC's Child Health CheckPoint and GenV forthcoming. These core studies capture health and development for over 68,000 children, young people and families tracked for up to four decades, enriched through linkage to administrative data and collection of biosamples. LifeCourse curates and standardizes metadata, making it easier for researchers worldwide to search and browse the available data and request access via https://lifecourse.melbournechildrens.com.

In addition to the contributions of individual studies, there is an increasing focus on research that works across multiple cohorts to address a shared interest in pathways leading to mental health, cardiometabolic health, and immune-related conditions. This approach offers several advantages, including replication of findings, improved precision, and the ability to investigate whether findings are similar across different societal contexts and developmental periods. This presentation will showcase features of the LifeCourse cohorts, the efforts of LifeCourse to support the reuse of these valuable data assets, and emerging research directions benefiting from the capacity to work across cohorts.

10D SYMPOSIUM

Using the UK Census Longitudinal Studies: Opportunities for Longitudinal Research and Comparative Analysis

Convenor: Alison Sizer, University College London

The symposium will showcase the opportunities that the UK Census Longitudinal Studies (UKCenLS) for Scotland (SLS), Northern Ireland (NILS) and England and Wales (ONS-LS) offer for longitudinal research and comparative analysis. It will discuss the similarities and differences between the studies and will also highlight the upcoming linkage of the 2021/2022 Census data to the studies. This linkage provides researchers with opportunities to examine a range of new topics owing to new questions introduced in the 2021 Census and to examine socio-economic and demographic changes taking place since the 2011 Census, a 10-year period that has seen Brexit and the Covid-19 pandemic. The papers in the symposium will present some of the research that has been done using each of the three UKCenLS to demonstrate the range of topics covered. The first paper introduces the UKCenLS, its support services and how they can help researchers to use data from the three studies. This presentation is followed by presentations from each of the Scottish Longitudinal Study, Northern Ireland Longitudinal Study and ONS Longitudinal Study showcasing some of the new and past research that has been undertaken. The symposium will conclude with time for participants' questions.

TALK 1: Using the UK Census Longitudinal Studies to Investigate Long Term Change

Presenter: Alison Sizer, University College London Co-author: Nicola Shelton, University College London

This paper will introduce the three UK Census Longitudinal Studies, and the data, including availability of linked administrative data. It will discuss their size and scope, and the upcoming linkage of the 2021/22 Census data. Arrangements for accessing the data from the user support units and some key areas for research will also be highlighted. Three longitudinal data sets are available from the UK Censuses. Each take a sample of the population from Census data and follow it across time, linking in administrative data and with capacity to link further data at low level geographies. The LSs are not based on voluntary surveys; they provide unparalleled coverage and sample sizes which allow research using risk factors and outcomes often unavailable from other sources. The ONS Longitudinal Study has 40 years of follow-up 1971 – 2011. The study follows a 1% sample of the England & Wales population linked to births, deaths and cancer registration data. The Scottish Longitudinal Study (SLS) has 20 years of follow-up 1991-2011, and linkages include health, education and environmental data (e.g., pollution), births, deaths, marriages. The SLS covers a 5% sample of the Scottish population. The Northern Ireland Longitudinal Study covers 28% of their population with 30 years of follow-up 1981-2011 and linkages to datasets such as health (including prescribing data), births, deaths, marriages and property data. Linkage of the 2021 Census data to each of the studies will extend the years of follow-up data by 10 years enabling researchers to examine changes that have taken place in 2011 – 2021/2 period, which saw Brexit and the Covid 19 pandemic.

TALK 2: Linking Backward and Looking Forward: Research Potential from the Scottish Longitudinal Study

Presenter: Lee Williamson, University of Edinburgh

This presentation will provide further information on the Scottish Longitudinal Study (SLS) and the datasets held as part of the standing study. It will cover the application process for researchers using it and outline research examples. The Longitudinal Studies Centre – Scotland (LSCS) was established in 2001 and hosts the SLS. This study links together routinely collected administrative data for a 5.3% representative sample of the Scottish population (about 270,000 people). It currently includes a wealth of information from the decennial censuses starting in 1991, vital events registrations (births, deaths and marriages), Scottish education data, and with appropriate permissions, can be linked to NHS health data including prescriptions, cancer registry and hospital admission data.

The size and scope of the SLS make it an unparalleled resource in Scotland for analysing a range of socio-economic, demographic and health questions. Additionally, the longitudinal nature of the SLS is particularly valuable, allowing an exploration of causality in a way that cross-sectional data collected at a single point in time does not. In this way, the SLS can provide insights into the health and social status of the Scottish population and, crucially, how it changes over time.

The presentation will also highlight what data is available as part of the SLS and the types of research can be done. Further, it will help potential new researchers decide whether the SLS is an appropriate resource for their research. A selection of research projects that have used Scottish education data (the Schools Census and Scottish Qualifications Authority (SQA) Attainment) and linked NHS health data, along with findings from linking back in time to the 1936 SLS birth cohort.

TALK 3: The ONS Longitudinal Study of England and Wales: The Research Possibilities of its Large Sample Size

Presenter: Nicola Shelton, University College London Co-author: Alison Sizer, University College London

The ONS Longitudinal Study (LS) covers England and Wales. Its members are selected based on four birthdays, providing a 1% representative sample of the population. individuals enter the study through birth on one of the four birthdays or immigration (and being born on one of the four birthdays) and leave through death or immigration. The main strength of the LS is its large sample size (>1 million), making it the largest nationally representative dataset in the UK, and allowing the analysis of small areas and specific population groups.

The LS has been used for a variety of research including occupation and education differences in mortality, research on social mobility, and research that has fed into the State Pension Age review. Since the LS's large sample size enables the examination of specific population groups, this presentation showcases current and recent research that has 1) examined the health outcomes of different occupational groups, and 2) compared the outcomes of different birth cohorts. The first research showcased examines the occurrence of long-term limiting illness in 2011 of individuals employed in the postal sector in 1971, comparing them to other occupational groups. The second piece of research focuses on two birth cohorts, one born at the start of the "second Elizabethan era" (1952) and the other 20 years later (1972), a period that saw profound and predominantly progressive political, social and economic changes. It gauges the influence of these events on the life courses of people living during this era.

TALK 4: Population Health Insights from the Northern Ireland Longitudinal Study (NILS)

Presenter: Estelle Lowry, Queen's University Belfast

Co-authors: Neil Rowland, Ian Shuttleworth, Queen's University Belfast

Diverging from the other longitudinal studies, the NILS uses a health spine (healthcard) to link Census data. Over the past decade, the breadth and depth of this dataset has been expanded to include not only the 1991, 2001 and 2011 Census data, but also information from additional administrative datasets such as education, housing and the environment. One of the key benefits of this healthcard foundation are regular biannual updates on vital events (births, deaths, marriages) and address changes. Furthermore, it allows for the possibility of Distinct Linkage Projects (DLPs). These involve the linkage of NILS data with health-related datasets such as care home admissions, prescription data, and dental records on a project-by-project basis. These are particularly important to contextualise health events through information from other sources on socioeconomic conditions and

features of the lived environment. Additionally, in the context of formulating and refining national health policies, operating at a population scale improves both statistical power and representativeness, while also allowing researchers to detect health risks to small sub-groups, often not adequately captured in sample-based research. The presentation will also highlight the addition of the Census 2021 data, extending the NILS span to 40 years. This new linkage will mean that some of the key issues arising over the past decade can be examined. We will discuss a specific group of projects which have focused on population health, namely mental health and COVID-19, and will showcase some interim results from a new linkage of Northern Ireland maternity services data.

10E INDIVIDUAL PAPERS (FAMILY TRANSITIONS)

TALK 1: China's Changing Family Structure and Child Behavioral Problems

Presenter: Jonathan A. Jarvis, Brigham Young University

Co-authors: Sabrina Wong, Carolyn A. Hong, Katherine Sweany, Mikaela J. Dufur, Brigham Young University

Over the past few decades, China has undergone a major demographic transition as increased divorce rates and decreased fertility coincided with rapid economic growth. Historically, divorce rates in high-income, non-western nations, such as Taiwan and South Korea, have been much lower than in high-income western nations. However, in recent years, these trends have begun to change. Today, divorce rates in China have followed similar patterns observed in Japan and South Korea, increasing from 0.35 per 1,000 people in 1980 to 3.2 in 2017. While the rate of marital disruption is now similar to other high-income nations, there are unique characteristics to family structure change that may affect Chinese children and adolescents differently. Family structures in China have been affected by a surge in internal migration since the 1990s, resulting in rising divorce rates and uniquely Chinese family problems such as 'left-behind children'. These disruptions to the family environment are associated with a host of problematic outcomes for children. These include poorer physical and mental health, and other child behavior problems that can extend into adulthood. Research on child behavioral problems tends to focus on children and families in high-income western nations. However, more recent research on families in Japan and South Korea suggests that the way families influence children may be contextual. Using data from the China Family Panel Studies Project (CFPS), we build upon this research by examining the effects of the family environment on child behavior problems in China. While China shares some historical and cultural elements with other east-asian nations, we find patterns in child behavior problems that are unique to the Chinese context. We interpret these findings through a comparative approach that not only includes trends from western nations, but also from other nations within East Asia.

TALK 2: Gender Disparities in Family Complexities and Health

Presenter: Philipp Dierker, Max Planck Institute for Demographic Research

Co-author: Mine Kühn, Tilburg University

Family transitions such as union formation, union dissolution, and childbearing are known to impact health outcomes. Prior research suggests that complex and unstable family trajectories characterized by union dissolution and multiple transitions may negatively impact mental and physical health for both men and women. However, the impact of re-partnering as an additional transition in unstable family trajectories on health remains unclear, particularly for men. This study examines the association between family complexity and health using data from the UK Longitudinal Household Study (UKHLS), which includes both partnership and household composition trajectories. Health is assessed by SF-12 physical and mental health scores and biomarker-based measures of allostatic load. Sequence analysis is utilized to model family complexity and construct different types of weighted complexity indices with varying assumptions regarding the onset of family complexity. Trajectories with at least one union dissolution experience and those that begin with separation with an underage child are defined as complex. Furthermore, we investigate whether re-partnering adds complexity that it is detrimental for health or not. Data span 38 years of family histories for 3,423 women and 2,643 men and the analyses account for childhood health to address potential selection bias. The findings indicate negative relationships between family complexity and health, with women more negatively affected by complex family trajectories, especially when complexity onsets with the separation when they have an underage child. Additionally, results show that effects of complexity on all health indicators are more detrimental, when re-partnering is not considered as a detrimental transition in the complexity indices, indicating beneficial re-partnering effects. Overall, this study advances understanding of the relationship between family dynamics and health outcomes and highlights gender differences and the differentiation between detrimental and beneficial transitions in family trajectories.

TALK 3: Enhancing Potentials for Research on Post-Separation Families Using the Growing Up in Germany (AID:A) Panel Study

Presenter: Simone Schüller, German Youth Institute (DJI)

Co-authors: Claudia Recksiedler, Diana Schacht, Christina Boll, Christine Entleitner-Phleps, Alexandra Langmeyer,

Sabine Walper, German Youth Institute (DJI)

The heterogeneity of family forms that arise after parental separation is not adequately captured in German administrative data due to a household-based approach to family definitions and the inability to identify stepfamilies. The "Growing up in Germany" (AID:A) study aims to provide extensive information on everyday practices, conflicts, and residential arrangements of a wide array of family forms, explicitly including single-parent households and stepfamilies. Recently, the study has evolved into a longitudinal panel study (since 2019) and expanded its questionnaire to measure more fine-grained nuances in care arrangements in single-parent households or stepfamilies after parental separation (since 2021), profoundly enhancing its research potentials on postseparation families in the German context. This study investigates the representativeness of postseparation families and introduces the conceptual framework of the survey module on post-separation families. We also discuss

these innovations in light of its current and future research potential and highlight its added benefit in comparison to similar family and household surveys in Germany.

TALK 4: Family Transitions in Europe: From Leaving Parental Home to First-Time Parenthood Through Macro-Policy Lens Presenter: Michaela Bunakova, McGill University

Objectives: This study attempts to deepen our understanding of the potential determinants of the shifting timing of life course transitions into adulthood in aging societies. Particularly, it aims to estimate the factors associated with the timing of becoming a first-time parent following an exit from parental home, with an emphasis on the interconnection between individual-level demographic factors, expectations about family formation and macropolitical factors in Europe.

Methods: We used survey data from 30 European countries from 2018 Round 9: Timing of life of the European Social Survey (ESS9). Using event history analysis and comparative social policy analysis methodology, we estimated the risk of becoming a first-time parent in Europe following the separation from living with parents. We estimated a set of six weighted proportional hazard regressions for survey data and presented key macro-level variables on Kaplan-Meyer Survival Curves.

Results: We found that individual-level sociodemographic characteristics of respondents consistently affect the risk of becoming a first-time parent, whereby the risk is lower for males, individuals who have never been in a formal relationship, with more years of education, higher mother's education and higher occupational class, compared to females, those who declared a formal relationship in the past, with lower personal and mother's educational attainment and lower occupational class, respectively. Additionally, we found that macro-level indicators of family-friendly policies matter strongly for respondents' decision to become parents and more generous benefits are associated with a higher probability of having a first child following a move away from parental home.

Conclusions: Our findings highlight an important unrecognized potential of the UNICEF's family policy recommendations to affect not only the wellbeing of children, but also the decision to become parents at a given time in the first place. Future research needs to examine fertility decisions and family transitions through the lens of access to affordable family-friendly policies.

10F INDIVIDUAL PAPERS (LATER LIFE 2)

TALK 1: Intergenerational Social Mobility and Mortality. Findings from the Irish Longitudinal Study on Ageing (TILDA)

Presenter: Mark Ward, Trinity College Dublin

Co-author: Anne Nolan, The Economic and Social Research Institute, UK

Life course research has provided evidence that the risk of mortality is associated with socioeconomic position (SEP) with higher risk associated with less advantaged SEP. Intergenerational social mobility has also been shown to influence mortality risk with higher destination class and upward mobility associated with a reduced risk. While describing social mobility patterns in Ireland and their association with premature mortality, we test three potential theoretical frameworks by which SEP and social mobility may influence mortality risk - the critical period hypothesis; the accumulation hypothesis; and the pathway hypothesis. This is the first study in Ireland to use linked survey-health assessment-mortality data, combining rich individual-level data with official death certificate data. Data are from The Irish Longitudinal Study on Ageing (TILDA, N = 8500). Death registration and social mobility data were available for 1,307 decedents. All deaths occurred before 31st January 2023 with a maximum 13- year followup period. Intergenerational social mobility was operationalised using the cross-classification of origin SEP (father's occupation) and destination SEP (own occupation). We use Cox proportional hazard model, with age at death the time variable. A Diagonal Reference Model (DRM) was applied with to estimate the effect of social mobility on mortality risk. 46% of participants experienced upward mobility while 12% were downwardly mobile. We found an independent association between childhood SEP and mortality (HR = 1.21) with an increased risk of mortality among participants from the manual childhood SEP group. This finding supports the critical period hypothesis. We did not find evidence to support the accumulation or pathway hypotheses. This study shows that childhood is a critical period that conveys risk into older adulthood. We also suggest that social mobility does not compensate for the negative effects of disadvantaged childhood SEP, while an advantaged childhood SEP may also provide a buffer against downward social mobility.

TALK 2: Intergenerational Educational Trajectories and Inequalities in Multimorbidity in Older European Adults

Presenter: Cornelia Wagner, University of Fribourg

Co-authors: Stéphane Cullati, Arnaud Chiolero, Cristian Carmeli, University of Fribourg

Multimorbidity, the co-occurrence of two chronic conditions or more, is a significant public health challenge in Europe today. The prevalence of multimorbidity increases with age and is higher in populations from disadvantaged socioeconomic backgrounds, particularly those with low educational attainment. It is unknown how these educational gradients in multimorbidity are shaped intergenerationally and whether they are affected by macro-social factors, specifically historical time and location. Therefore, our aim is to utilize population-based multi-generational multi-country data to (1) assess the role of parental and individual education in shaping intergenerational inequalities in multimorbidity including different disease patterns, and (2) examine the potential variability of these inequalities by birth cohort and country group. We will use data from over 50,000 adults born before 1965 who participated in the Survey of Health, Ageing and Retirement in Europe (SHARE), comprising 14 countries. Multimorbidity (outcome) will be ascertained between 2013 and 2020. Educational trajectories (exposure) are

High-High (reference), Low-High, High-Low, and Low-Low, corresponding to the sequence of parental-individual-educational attainment. We will quantify inequalities as population attributable fractions, estimating the proportion of multimorbidity cases that would have been prevented had disadvantaged intergenerational educational trajectories been modified to High-High. We expect the findings to give an intergenerational and macrosocial insight into the development of multimorbidity in later life.

TALK 3: Factors Associated with Care Home Use for Older People in Scotland: Analysis of Cohorts Before and After a Social Care Policy Change

Presenter: Helen Corby, University of Edinburgh

Co-authors: Matthew Iveson, Tom Russ, Chris Dibben, University of Edinburgh

Background Scotland has an ageing population and with greater numbers of older people will need to provide appropriate old age social care. In 2002 a new social care policy removed means testing, instead providing personal and nursing care free throughout Scotland for over 65s based on a needs assessment. Aims Exploring the factors associated with greater likelihood of using came homes for older people and investigating if these were stable between 1991 and 2011. Noting a significant social policy change over the period of study. Methods Linked administrative data from The Scottish Longitudinal Study (SLS) (https://sls.lscs.ac.uk/) provided a representative 5.3% sample of Scottish population aged 65+ for two cohorts, 1991-2001 and 2001-2011. Socio-demographics, household members, informal care, geography and health status from one census and older peoples care status at the following census 10 years later were used. Effects of these factors on care outcome at follow-up were modelled using logistic regression. Results In the 1991-2001 cohort, age, sex, marital status, deprivation, long-term health conditions, housing tenure, living in a flat, recent employment, urban rural classification, and population density were all associated with care outcome. In the 2001-2011 cohort, all of the spatial factors no longer predicted care outcome, suggesting in the later cohort there was less inequality in who used social care based on geography and deprivation. Sex/gender differences were also found in which factors were important predictors of care home use. Key Findings Different factors were associated with care outcomes at follow-up in the later cohort after the introduction of the 2002 policy for free personal and nursing care. In this later cohort, no evidence was found for the spatial inequalities found in the earlier cohort. Further research is needed to investigate whether this difference might be attributable to the policy or wider social care reform over the period.

TALK 4: A Systematic Review on Socioeconomic Measurement Over the Life-Course Among Older Adults in Low- and Middle-Income Countries

Presenter: Zahraa Beydoun, Qatar University and Maastricht University

Co-authors: Hans Bosma, Nicolle Boumans, Maastricht University; Sawsan Abdulrahim, American University of Beirut; Sana Elashie, Qatar University

Low-middle income countries (LMICs) suffer from economic instability affecting people's life-courses. For older people in LMICs, socioeconomic circumstances might have changed substantially during their lives. We conducted a systematic review of studies published between 2000-2021 to provide an overview of SES measurement over the life-course focusing on leading noncommunicable diseases among older people in LMIC. Three databases were searched during October-December 2021 using search items identified by the research team (PUBMED, EMBASE, and SocINDEX). English articles (n=2735) were exported to endnote checking for duplicates leaving us with 2031 articles. Grading the studies was done using the Newcastle - Ottawa Quality Assessment Scale. After the first phase of reviewing abstracts, 12 were included. After the second phase of grading the full text articles, all 12 studies were included (8 cross-sectional and 4 cohorts). Based on preliminary analysis, all the studies were conducted in upper-middle-income countries except for one that was conducted in lower-middle-income countries. Studies examined diabetes (8 studies), ischemic heart diseases (7 studies), dementia (1 study) and chronic obstructive pulmonary disease (1 study). All the studies controlled for age and sex in their multivariate analysis. Results showed that childhood SES was measured through; perception of family's economic situation, being hungry, place of residence, home overcrowding, mother's employment, father's occupation, parent's education, birthplace, toilet availability inside the house, sleeping in the room used for cooking, school drop-out, receiving financial help, wearing shoes regularly, and key parental possessions. Moreover, adult/current SES was measured through; place of residence, educational level, longest held job, income sufficiency, income, purchasing power, financial situation perception, medical insurance, and food shortage. Results informs researchers on the importance of using a life course approach in measuring SES in older people confronted with economic instabilities, such as is more common in LMICs. Practical suggestions for life-course SES measurements are given.

INVITED TALK (Winner of the 2022 SLLS John Bynner Distinguished Scholar Award)

Time as Frontier: Changing Work and Life Courses in Uncertain Times

Presenter: Phyllis Moen, University of Minnesota

Technological, demographic, economic and social forces are upending the institutionalized clocks and calendars structuring the temporal rhythms of life. The result? Heightened risks, inequities, and uncertainties, but also possibilities for reimagining and restructuring deeply embedded time (and place) cages, possibilities most evident in emerging life stages and new ways of working. This speaks to the value of an institutional life course perspective assessing the unequal distributions and impacts of public and organizational inertia and innovations, together with individual and family improvisations, in these turbulent times.

KEYNOTE PRESENTATION 4

Navigating Through Difficult Times: Family Transitions, Strains and Coping

Presenter: Sabine Walper, German Youth Institute (DJI)

Parental separation and stepfamily formation mark salient points in family development which call for major adaptations among parents and children. Although divorce rates have declined in Europe, the rise of unmarried parenthood and the higher instability of unmarried unions contribute to still high rates of parental separations, often followed by new partnerships. Based on data from Germany, which figures average in European divorce statistics, this talk addresses four main issues. First, based on a comparison of two youth cohorts, more recent changes in young people's experiences of parental separation are discussed, focusing their contact and relationship with the nonresident father as well as risks of disadvantages in wellbeing. Secondly, findings regarding shared parenting in separated families are presented, addressing the still low prevalence of this arrangement in Germany, its predictors and links to child wellbeing. Third, the role of interparental conflict and coparenting problems in father-child contact and children's wellbeing will be pointed out, addressing the outcomes of impaired relationship dynamics as well as legal conflict between parents. Finally, the need for preventive support for parents and findings from the evaluation of a parenting program are discussed.
